

A Useful Table precedes the Subject Index

INDEX TO HORTICULTURAL ABSTRACTS

Volumes XI-XV. 1941-1945



COMMONWEALTH BUREAU OF HORTICULTURE
AND PLANTATION CROPS

EAST MALLING, KENT, ENGLAND

Obtainable from C.A.B., Central Sales Branch, Penglais, Aberystwyth, Wales.

October, 1949

Price 35/-

THE COMMONWEALTH BUREAU OF HORTICULTURE AND PLANTATION CROPS

This Bureau is one of a group of Bureaux and Institutes covering the following subjects: agricultural parasitology, animal breeding and genetics, animal health, animal nutrition, biological control, dairying, entomology, forestry, horticulture and plantation crops, mycology, pastures and field crops, plant breeding and genetics and soil science, organized under the:

EXECUTIVE COUNCIL COMMONWEALTH AGRICULTURAL BUREAUX

2 Queen Anne's Gate Buildings, Dartmouth Street, London, S.W.1

Secretary—SIR HERBERT HOWARD.

The word Commonwealth replaced Imperial in the titles of the Bureaux as from January, 1948.

The Scientific Staff of the Imperial Bureau of Horticulture and Plantation Crops during the period in which Volumes XI-XV were compiled was in January, 1941:

Director R. G. HATTON, C.B.E., M.A., D.Sc., V.M.H.

Deputy Director D. AKENHEAD, M.A., B.Sc.

Assistant G. ST. CLAIR FEILDEN, B.A.

and in December, 1945:

Consultant Director R. G. HATTON, C.B.E., M.A., D.Sc., V.M.H., F.R.S.

Director D. AKENHEAD, M.A., B.Sc.

Assistants [G. ST. CLAIR FEILDEN, B.A. (retired July, 1945)]
V. H. GOLDSCHMIDT, Ph.D. (appointed June, 1943)
H. WORMALD, D.Sc., A.R.C.S., D.I.C. (appointed
October, 1945)

INDEX TO HORTICULTURAL ABSTRACTS

Volumes XI-XV. 1941-1945

Compiled by
D. AKENHEAD



COMMONWEALTH BUREAU OF HORTICULTURE
AND PLANTATION CROPS

EAST MALLING, KENT, ENGLAND

October, 1949

Price 35/-

	XI 1941		XII 1942		XIII 1943		XIV 1944		
	Abstr. Noted		Abstr. Noted		Abstr. Noted		Abstr.		
Miscellaneous	144	65	156	55	109	63	129	689	7.1
Deciduous crops—									
Tree fruits	115	19	185	35	188	15	260		
Small fruits and nuts	22	16	25	9	53	6	46		
Vines	19	3	13	7	21	2	34		
Plant protection ..	131	24	195	40	213	29	305		
Vegetables	212	66	308	76	387	94	557		
Ornamentals ..	41	9	30	7	33	11	40	4,575	47.4
Citrus and sub-tropicals	177	17	131	19	126	17	142		
Tropical crops	281	53	185	37	157	20	162	2,703	28.4
Storage	88	14	61	12	61	2	71		
Packing, processing and fruit products ..	105	23	93	33	123	24	142	1,046	11.1
Reviews of books ..	21	—	22	—	20	—	2	536	5.7
Notes on report ..	80	37	81	26	54	20	8		
Totals	1,415	346	1,463	356	1,525	303	1,972	9,549	99.7

SUBJECT INDEX

Horticultural Abstracts, Vols. XI-XV

- Abacá (*Musa textilis*), *see* Hemp, manila
Abies, balsam from, XIV, 1236
 Abscission, *see* Leaf fall, Fruit fall, etc.
Acacia, *see also* Wattle
Acacia senegal, source of gum arabic, XIII, 610
 Acclimatization of fruit, Mičurin's methods, *see also* Mičurin, XIV, 25, 26
 Acenaphthene induces polyploidy, XIII, 32
Acer spp., source of maple sugar, XIV, 1214
 Acetylene treatment—
 for lemon colouring, XIV, 1387
 of peaches, pre-storage, XI, 261
 for pear ripening, XI, 257
 of plums, pre-storage, XI, 258, 260
 for potato dormancy breaking, XIII, 149, 468, 469, 1630
Achras zapota, *see* Sapodilla
 Acidity in orange reduced by arsenical sprays, XI, 162
 Acids, organic, in plant tissues, analysis of, XI, 1084
Aconitum spp. as insecticidal plants, XIV, 1657
 Acorns, a source of starch, XV, 150
 Acrobasis—
 caryae, XIV, (1662); XV, (1071), (1658)s
 juglandis, XV, (1658)s
Acrolysis ascetella, a leek pest, XV, 944
Actinidia chinensis—
 cultivation, XIII, 70; XIV, 530
 vitamin C in, XIV, 406
Actinomyces—
 control in soil, XV, 1773
 ipomoea, XII, 1484
 in potato tubers, XI, (1229); XII, 156, (158), 1386
Actinomycetae, antagonism to *Fusarium oxysporum cubense*, XIV, 1928
 Adlay (*Coix lachryma-jobi*), XI, (965)
 Administration Report, *see* Annual Report
 Adulteration of preserves, detection, XII, 1545
 Advisory—
 centres in England and Wales, XIII, 1626
 service for agriculture and horticulture, a national, in U.K., XIV, 971
Aegle marmelos as orange rootstock, XII, 1579; XIV, 961
Aenoplax carpocapsae, codling moth parasite, XV, 372
 Aerosol, method of applying sprays, *see* Sprays, aerosol
 Aesculin recovery from *Bursoria spinosa*, XIII, 1618
 Africa, farming in South West, XIII, 704, 1486
 Agar from seaweed, XIV, 1670; XV, 9
Agathis alba, resin from, XI, (1506)
 Agave—
 americana, XIII, (1553)
 fourcroydes or henequen XIV, 1343
 sisalana, *see* Sisal
 spp. trials in Tanganyika, XV, 389
Ageratum conyzoides, host of tobacco viruses, XI, 1368
 Aging, physiological factors in tree, XIII, 678
Agonoscelis puberula on tung, XIV, 863
 Agricultural Engineering Record, Vol. 1, No. 1, XV, 2067
 Agricultural literature, bibliography, XII, 1172
Agriculture in the Americas, a new Periodical, XII, 1572
 Agriculture—
 and animal husbandry in India, 1938/9, XII, 1577
 in the Gold Coast, XIV, 1879
 in the Matengo Highlands, Tanganyika, XIV, 1880
 restarting, in devastated Europe, XIII, 349
Agrilus communis, a raspberry pest, XI, 1185
Agriolimax agrestis, the field slug, XII, (462)
Agriotes spp., *see* Wireworm
Agrobacterium rubi on boysenberry, XIV, (1184)
Agromyza—
 frontalis, XII, 1319
 simplex, XIV, 1740
 Agronomy in Australia, XIV, 977
Ailanthus glandulosa seedlings, day length affects, XII, 744
 Airborne material, catching and counting, XI, 663
 Air conditioning glasshouses, XIII, 849
 Albino plant cultivation, XII, 1149
 Albizzia—
 malacocarpa shade of coffee, XIV, 1895
 stipulata interplanted with tea, XIII, 343
 Alcohol, plant sources in Brazil, XV, 826
Aleurites, *see also* Tung—
 cordata, oil from monoecious and female trees, XI, 899
 montana—
 in Brazil, XI, 531
 seedlings at Amani, XII, 320
 transplanting, XII, 1487
Aleurodes vaporariorum, *see also* *Trialeurodes*, XV, 1692
Alfonsia oleifera oil palm, XV, 1292
 Algae—
 green, economic use of, XII, 1368
 marine, war interest in, XIV, 980
 Algemeen Landbouw Syndicaat, Netherlands East Indies, A.R., 1940, XII, 319.
 Algeria—
 fruit investigations, XIV, 2016; XV, 1194
 fruit suitability of different districts, XIII, 988
 regulations on production of seeds, vines and fruit trees, 1938-1942, XV, (1006)
 vegetable production, XV, 1077, 1078, 1661, 1662
 Alkaline medium for glasshouse tomatoes, neutralization of, XII, 510
 Alkaloids—
 content modified by grafting, XV, 155, 156, 658, 659
 in *Nicotiana*, XIII, 140, 141, 1364, (1369); XIV, (691), (1803); XV, 155
 some plants producing, XV, 1741
 Allergens, chemistry of, XIV, (2003)
 Allium—
 cepa, *see* Onion
 vineale, the wild onion, XIV, 1162
 Alliums—
 origin of some edible, XIII, 913
 virus diseases, *see also* Onion, XV, (596)

SUBJECT INDEX

- Allotment holder's manual for Cumberland and Westmorland, **XIII**, (947)
- Allotments, vegetable, in war time, **XI**, 781; **XII**, 905
- Allotropia burrelli*, a parasite of *Pseudococcus comstocki*, **XV**, (128)
- Alma Ata region, wild apricots in, **XIII**, 723
- Almanaque del Ministerio de Agricultura de la Nacion, B. Aires, 1943, **XIV**, 417
- Almond—
 carpel morphology, **XI**, 417
 crown gall control, **XII**, 117
 diseases, **XIII**, 426, 1280
 edible varieties, **XIII**, 417
 growing—
 in Algeria, **XIII**, 789
 in Italy, **XII**, 93
 in S. Africa, **XII**, 94
 in the U.S.A., **XII**, 1283
 leaf, carbohydrate content, **XIII**, 1233
 pollination, **XV**, 1534
 pruning, **XV**, 1533
 varieties for irrigated and unirrigated land, **XIII**, 1234
- Alnarp—
 Plant Protection Institute at, **XIII**, 418
 Vegetable Research Station A.R. 1939, **XIII**, 1090
- Alocasia macrorrhiza* and its varieties, **XII**, (273)
- Aloe—
 bitter, processing, **XI**, 1488
 (*Furcraea gigantea*) industry in Mauritius, **XIV**, 872
 juice, **XV**, 2055
- Aloinae* in European gardens, **XV**, 759
- Alsophila pometaria*, **XII**, (462)
- Altai horticultural research station, work at, **XIV**, 461
- Alternaria*—
 on apple, **XIII**, 107
 citri, **XI**, 154; **XIII**, 254; **XV**, (1914)b
 compacta on castor bean, **XIV**, 1233
 passiflorae, **XI**, 534; **XII**, 863
 radicina on carrot, **XII**, 950; **XIII**, 911
 ricini, **XV**, (1298)
 solani, see Tomato *Alternaria*
 spp. seed borne, **XV**, 139
 on zinnia, **XII**, 1458
- Altissima, see *Hibiscus sabdariffa altissima*
- Altitude affects plant physiology and biochemistry, **XIII**, 360; **XV**, 1392
- Alto Douro, Portugal, flora, **XV**, 429
- Aluminium—
 cause of blue colour in hydrangeas, see also Hydrangea, **XIV**, 295
 inactivates phosphorus, **XIV**, 444
- Amani—
 A. R. E. Afr. Agric. Res. Stat. 1939, 1940 and 1941, **XI**, 325; **XII**, 320, (1584)
 food crops available from, **XII**, 604
- Amaryllis disease (*Stagonospora curtisii*), **XIV**, (1312)
- Amblypelta cocophaga*, **XI**, 593
- Ambrosia—
 causes hay fever, **XIII**, (706)
 sp. (Ragweed), **XV**, 1701
 trifida, photoperiod affects sex expression in, **XII**, (752)
- Amelanchier vulgaris*, rootstock for apples and pears, propagation, **XIV**, 48
- America, Latin, plants and plant science in, **XV**, 2069
- American—
 agriculture, history of, **XII**, 314
 Phytopathological Society meetings, various, **XI**, (650), **XII**, (1164); **XV**, 596, 598
 Society of Plant Physiologists, directory of members, **XIII**, (1638)
- Americas, Agriculture in the, **XII**, 1572
- Amino acid determination in vegetables, **XV**, (1336)
- Ammonia, toxicity to plants, **XI**, 376
- Ammonium sulphamate as herbicide, **XII**, 884
- Amorpha fruticosa* composition, **XIV**, 1183
- Ampelography, **XII**, 412, 1276, 1277
- Amygdalus communis*, see Almond
- Anabasin—
 in grafted tobacco, **XIV**, (691); **XV**, 155
 toxicity to citrus thrips, **XIV**, (858), 1848
- Anabasis aphylla* cultivation, **XIV**, 634
- Anabrus simplex*, the Mormon cricket, **XIV**, (161)
- Anacardiaceae* species at Kamenec-Podoljsk Botanical Garden, **XV**, 191
- Anacardium occidentale*, see Cashew nut
- Anagrus* parasite of mealy bug, **XII**, 1511; **XIII**, 1014
- Analysis—
 correlation, **XIV**, (1476)
 of nutrient solutions, chemical, **XIV**, 2007
 plant, see Plant
 soil, see Soil
 spectrographic, **XI**, 1080, (1092), 1350; **XII**, 1184; **XIV**, 445, 1443; **XV**, 7, 8, 1354, (2059)s
 statistical, **XIII**, (1138), **XIV**, (1476), **XV**, (432), (972)
- Anand Institute of Agriculture, Bombay, A.R. 1940/41-1943/44, **XIV**, 951, (968); **XV**, (1366)
- Anasa tristis*, **XV**, 1792
- Anastrepha*, see also Fruit flies—
 fraterculus, **XII**, 873; **XV**, 1900, (1914)a
 fruit flies, **XII**, 1076; **XV**, 798, 799
 ludens, **XII**, (235); **XIV**, 1849, 1886; **XV**, 798, 799, 1231
 mombinpraetians and *A. suspensa*, **XII**, 260
- Anatomy of apple rootstocks, **XI**, 42; **XV**, 1444
- Anemone, commercial production in England, **XIV**, (1312)
- Aneurus laevis*, **XII**, 1319
- Angelica production, **XII**, 1400
- Angiosperms, cuticle in, **XIV**, (19)
- Angola, plant map of, **XIV**, (1370)
- Anguillulina—
 dipsaci on onion, see also Onion eelworm, **XV**, 1149, 1763
 pratensis as tea pest, **XII**, 1574
- Anisandrus dispar*, **XI**, 1175; **XIV**, 141, 1623
- Annapolis Valley fruit area, soil survey, **XV**, 488
- Annona—
 cherimola, see Custard apple
 muricata=soursop, seed oils, **XIII**, (656)
- Annual Reports, see also Reports
 A.R. Algemeen Landbouw Syndicaat, Netherlands East Indies, 1940, **XII**, 319
 A.R. Amani E. Afr. Res. Stat., 1939-1941, **XI**, 325; **XII**, 320, (1584)
 A.R. Anand Institute of Agriculture, Animal Husbandry and Dairying, Bombay, 1940/41-1943/44, **XIV**, 951, (968); **XV**, (1366)
 A.R. Antigua Dep. Agric., 1939, **XI**, (1054)
 A.R. Argentina Minist. Agric., hort. Dep., 1940 and 1941, **XIII**, 1091

SUBJECT INDEX

Annual Reports (*continued*)—

- A.R. Arizona agric. Exp. Stat., 1939/40 and 1942/43, **XI**, (1054); **XIV**, 1436
- A.R. Arkansas agric. Exp. Stat., 1939/40-1942/43, **XI**, 1017; **XV**, 2071
- A.R. Assam Dep. Agric., 1939/40, **XI**, 1018
- A.R. Australia C.S.I.R., 1939/40-1943/44, **XII**, 1146, 1147; **XIII**, 1630; **XV**, 369, 1348
- A.R. Barbados Dep. Sci. Agric., 1939/40, 1940/41 and 1943/44, **XII**, (337), 1573; **XV**, 2072
- A.R. Basutoland Dep. Agric., 1939/40-1943/44, **XI**, (1526); **XII**, (1164); **XIII**, (1100); **XV**, (1366), (2082)a
- A.R. Bermuda Dep. Agric., 1940-1944, **XI**, (1054); **XII**, 1148; **XIV**, 418; **XV**, 370, (1366)
- A.R. Bihar agric. Dep., 1938/39 and 1937/38, **XI**, 1019, (1526)
- A.R. British Columbia Dep. Agric., 1939, **XI**, 1020
- A.R. British Guiana Dir. Agric., 1939-1943, **XI**, (1054), (1526); **XIII**, (347), (1638); **XV**, (946)
- A.R. British Honduras Dep. Agric., 1940-1944, **XII**, (337); **XIII**, (1100); **XIV**, (968); **XV**, (946), 2073
- A.R. British West Indies Central Sugar Cane Breeding Station, Barbados, 1939/40 and 1940/41, **XIII**, (672)
- A.R. Bureau of Chemistry, California, 1940, **XII**, 321
- A.R. Burma Dep. Agric. agric. Statistics, 1939/40, **XI**, (1054)
- A.R. Burma Dep. Agric. Operations, 1939/40, **XI**, (1054)
- A.R. Campden Fruit and Vegetable Preservation Research Station, 1943, **XIV**, 2018
- A.R. Carnegie Institution of Washington, Division of Plant Biology, 1939/40 and 1940/41, **XI**, 1022; **XII**, 1149
- A.R. Cawthron Inst. N.Z., 1939-1942 and 1943/44, **XI**, 326, 1512; **XIII**, 1092; **XIV**, 954; **XV**, 372
- A.R. Central Sugar Cane Breeding Station, Barbados, 1939/40 and 1940/41, **XIII**, (672)
- A.R. Ceylon Coconut Res. Scheme, 1940-1942, **XI**, 1023; **XIII**, 1093; **XIV**, 1437
- A.R. Ceylon Dir. Agric. Administ. Rep., 1939-1942, **XI**, (1054); **XII**, 323; **XIII**, (672); **XIV**, 955
- A.R. Cheshunt exp. Res. Stat., 1940, 1941 and 1943, **XI**, 1024; **XII**, 1575; **XV**, 373
- A.R. Coffee Board of Kenya, 1940/41, 1943/44 and 1944/45, **XII**, 327; **XIV**, 2023; **XV**, 1248
- A.R. Coffee Res. Exp. Stat. Lyamungu, Moshi, 1938, 1940, 1939, 1941-1943, **XI**, 1048, 1522; **XII**, 1159, 1582; **XIII**, 1635; **XV**, 388
- A.R. Colorado agric. Exp. Stat., 1941/42 and 1942/43, **XV**, 374, 375
- A.R. Costa Rica Centro nac. Agric., 1939, **XI**, (1054)
- A.R. Coun. sci. industr. Res. Aust., *see* A.R. Australia C.S.I.R.
- A.R. Cyprus Dir. Agric., 1939-1941, 1943 and 1942, **XI**, 1025, 1526; **XIII**, (347); **XIV**, (1455), **XV**, (391)
- A.R. Dominica Agric. Dep., 1941-1943, **XII**, (1164); **XIII**, (1638); **XV**, (391)

Annual Reports (*continued*)—

- A.R. Dominion Canada Minist. Agric., 1939/40-1941/42 and 1943/44, **XI**, 1021; **XII**, 322; **XIII**, 662; **XV**, 925
- A.R. East African agric. Res. Stat. Amani, 1939-1941, **XI**, 325; **XII**, 320, (1584)
- A.R. East Malling Res. Stat., 1941-1943, **XII**, 1576; **XIII**, 1631; **XIV**, 2020
- A.R. Edinburgh and East of Scotland Coll. Agric., 1939/40 and 1940/41, **XI**, 1026; **XII**, (1584)
- (A.)R. Eidgenössische Versuchsanstalt für Obst- Wein u. Gartenbau in Wädenswil, *see* Report Wädenswil
- A.R. Eire Minist. Agric., 1939/40-1943/44, **XI**, (1054); **XII**, (337); **XIII**, (347); **XV**, (946)
- A.R. Fermentation Industries, 1940-1943, **XI**, (1054); **XII**, (723); **XIII**, (672); **XIV**, 966
- A.R. Field Experiments in Sugar Cane in Trinidad, 1940-1942 and 1944, **XI**, (1054); **XII**, (273); **XIII**, (672); **XV**, (2082)f
- A.R. Fiji Dep. Agric., 1940, **XII**, (723)
- A.R. Florida Agric. Exp. Stat., 1941/42, 1942/43, 1939/40 and 1940/41, **XV**, 930, 931, (946)
- A.R. Friesdorf-Bad Godesberg gärten. Versuchsanst., 1939/40, **XII**, 713
- A.R. Gambia Dep. Agric., 1939/40 and 1941/42, **XI**, (1054); **XIII**, 341
- A.R. Georgia Exp. Stat., 1940/41, 1943/44 and 1938/39-1941/42, **XII**, 326; **XV**, 1349, 2074
- A.R. Gold Coast, Ashanti, on Agriculture, 1943/44, **XV**, 368
- A.R. Gold Coast, Central Province, on Agriculture, 1943/44, **XV**, 377
- A.R. Gold Coast Dep. Agric., 1939/40-1943/44, **XI**, 1027, 1514; **XIII**, 342; **XIV**, 1438; **XV**, 932
- A.R. Gold Coast, Eastern Province, on Agriculture, 1943/44, **XV**, 376
- A.R. Gold Coast, Western Province, on Agriculture, 1943/44, **XV**, 378
- A.R. Hawaii agric. Exp. Stat., 1940, **XI**, 1028
- A.R. Hillsborough, *see* Northern Ireland
- A.R. Hong Kong Supt. bot. For. Dep., 1940/41, **XII**, (723)
- A.R. Idaho agric. Exp. Stat., 1943/44 and 1942, **XV**, 1350, (1366)
- A.R. imp. Coll. trop. Agric. Trinidad, 1940-1944, **XII**, 335, 1161; **XIII**, 668; **XIV**, 1449; **XV**, 1364
- A.R. imp. Counc. agric. Res., India, 1940/41-1943/44, **XII**, 1152; **XIII**, 1094; **XV**, 379, 380
- A.R. Indian Tea Ass., sci. Dep., Toklai, 1939, 1941, 1942 and 1940, **XI**, 1029; **XIII**, 343; **XIV**, 419; **XV**, 1351
- A.R. Iowa agric. Exp. Stat., 1939/40-1943/44, **XI**, 1030; **XIV**, 420, 1440; **XV**, 1352
- A.R. Jamaica Dep. Agric., 1939/40, 1940/41, 1942/43 and 1943/44, **XI**, 1031; **XII**, 1153; **XIV**, 2022; **XV**, 1353
- A.R. John Innes Horticultural Institution, 1940-1944, **XI**, 1032; **XII**, 712; **XIII**, 665; **XIV**, 960; **XV**, 935
- A.R. Kizimbani Exp. Stat., Zanzibar, 1943, **XIV**, 1454
- A.R. Long Ashton Res. Stat., 1943, **XIV**, 2024
- A.R. Macaulay Inst. Soil Res., 1942/43 and 1943/44, **XIV**, 1443; **XV**, 1354

SUBJECT INDEX

Annual Reports (*continued*)—

- A.R. Madras, Operations Dep. Agric., 1939/40, **XI**, 1516
 A.R. Madras, Subordinate Officers, Dep. Agric., 1939/40 and 1940/41, **XI**, 1034; **XV**, 381
 A.R. Madras, Work on the Agricultural Stations, 1939/40, 1941/42 and 1942/43, **XI**, 1033; **XIV**, 961; **XV**, 936
 A.R. Maine agric. Exp. Stat., 1938/39-1940/41, **XII**, 714, 1155, 1156
 A.R. Malaya Deps. Agric., 1939 and 1940, **XI**, 1036; **XII**, 328
 A.R. Massachusetts agric. Exp. Stat., 1943/44, **XV**, 937
 A.R. Mauritius Chamber of Agriculture, 1940/41 and 1942/43, **XII**, 718; **XIV**, 962
 A.R. Mauritius Dep. Agric., 1939-1942, **XI**, 1038; **XII**, (337), (1584); **XIV**, 1444
 A.R. Minnesota agric. Exp. Stat., 1938/39 and 1942/43, **XI**, (1054); **XV**, 1355
 A.R. Missouri agric. Exp. Stat., 1938/39, **XIII**, 1095
 A.R. Montserrat agric. Dep., 1939 and 1940, **XI**, (1054); **XII**, (1164)
 A.R. National Institute of Agricultural Botany, Cambridge, 1939/40-1941/42, **XII**, 1150; **XIV**, 1445
 A.R. National Institute of Agricultural Engineering, Askham Bryan, 1943/44, **XV**, 382
 A.R. National Research Council of Canada, 1942/43 and 1943/44, **XIV**, (1455); **XV**, 926
 A.R. Nebraska agric. Exp. Stat., 1940, 1941 and 1944, **XII**, (337); **XIII**, 1096; **XV**, (2082)b
 A.R. New Guinea Dep. Agric., 1939/40, **XI**, (1526)
 A.R. New Hampshire agric. Exp. Stat., 1938-1940, **XII**, 1578
 A.R. New Jersey agric. Exp. Stat., 1941/42-1943/44, **XIV**, 2026; **XV**, (2082)c
 A.R. New York agric. Exp. Stat. Geneva, 1939/40 and 1943/44, **XI**, 1039; **XV**, 939
 A.R. New Zealand Dep. Agric., 1940/41, 1943/44 and 1941/42 and 1942/43, **XII**, 329; **XV**, 383, (2082)d
 A.R. New Zealand D.S.I.R., 1940/41-1944/45, **XI**, 1518; **XII**, (405); **XIII**, 344, 1633; **XIV**, 2025; **XV**, 2075
 A.R. Nigeria Dep. Agric., 1943, 1939/40 and 1941 and 1942, **XV**, 940, 1357
 A.R. North Carolina agric. Exp. Stat., 1943, **XV**, 1358
 A.R. Northern Ireland agric. Res. Inst. Hillsborough, 1940/41-1943/44, **XI**, (1526); **XII**, (1584); **XIV**, 958; **XV**, (391)
 A.R. N. Rhodesia Dep. Agric., 1941 and 1943, **XII**, (1584); **XIV**, (2030)
 A.R. Nyasaland Dep. Agric., 1939-1944, **XI**, (1054), 1519; **XIII**, (347); **XIV**, (426); **XV**, (1366), 2076
 A.R. Ohio agric. Exp. Stat., 1937/38, **XI**, (1054)
 A.R. J. E. Ohlsens Enkes Plantepatologiske Laboratorium, 1941/42, **XIV**, 1108
 A.R. Oil Palm Res. Stat. Nigeria, 1939/40-1943/44, **XIII**, 666; **XIV**, 421; **XV**, 384
 A.R. Oregon State Horticultural Society, 1943, **XV**, 941

Annual Reports (*continued*)—

- A.R. Orissa agric. Dep., 1936/37-1939/40, **XII**, (1164), 1579
 A.R. Palestine Dep. Agric., 1940/41, 1941/42, 1939/40, 1942/43 and 1943/44, **XII**, 1157; **XIV**, 422, (426), (2030); **XV**, 942
 A.R. Pennsylvania agric. Exp. Stat., 1939/40-1943/44, **XI**, (1054); **XII**, 719; **XIII**, 345; **XIV**, 963; **XV**, 385
 A.R. Puerto Rico agric. Exp. Stat. Rio Piedras, 1939/40, 1941/42, 1942/43 and 1940/41, **XI**, 1520; **XIV**, 423; **XV**, 386, (2082)e
 A.R. Queensland Acclimatisation Soc., 1940/41-1943/44, **XI**, 1521; **XII**, 1580; **XIV**, 964; **XV**, 387
 A.R. Queensland Dir. Plant Industry, 1940 and 1941, **XI**, 1042; **XII**, 331
 A.R. Rhode Island Exp. Stat., 1941, 1943 and 1944, **XIII**, 667; **XV**, 943, 2077
 A.R. Rubber Res. Bd Ceylon, 1940-1943, **XII**, 324; **XIII**, 664; **XIV**, 957; **XV**, 928
 A.R. Rubber Res. Inst. Malaya, 1939 and 1940, **XI**, 1043; **XII**, 716
 A.R. Sabour Fruit Res. Stat., 1938/39, **XI**, 1044
 A.R. Salisbury agric. Exp. Stat., 1940/41-1943/44, **XII**, 1481; **XIV**, 965, 2027; **XV**, 1360
 A.R. Sierra Leone Dep. Agric., 1938-1940, 1943 and 1941 and 1942, **XI**, 1045; **XII**, 332, 1158; **XV**, 1361, (1366)
 A.R. Sisal Exp. Stat. Tanganyika, 1938 and 1943, **XI**, (1054); **XV**, 389
 A.R. S. Africa Dep. Agric., 1939/40-1943/44, **XI**, 327; **XII**, 720; **XIII**, 1634; **XIV**, 1448; **XV**, 1362
 A.R. S. Australia Minist. Agric., 1939/40, **XI**, 1046
 A.R. S. Rhodesia Dep. Agric., 1944, **XV**, 2078
 A.R. S. Rhodesia Dep. Agric., Plant Pathology Branch, 1940, **XI**, (1054)
 A.R. Spanish Territories in the Gulf of Guinea, on Agriculture, 1941, **XV**, 933
 A.R. St. Lucia Dep. Agric., 1939-1943, **XI**, (1054), (1526); **XII**, 1581; **XIII**, (1638); **XV**, (391)
 A.R. St. Vincent agric. Dep., 1939-1943, **XI**, 1047, (1526); **XIII**, (347); **XV**, (946)
 A.R. Station fédérale d'essais viticoles et arboricoles à Lausanne, 1939-1942, **XII**, 1154; **XIV**, 1441
 A.R. Sugarcane Res. Stat. Mauritius, 1939-1943, **XI**, 1037, 1517; **XII**, (1584); **XIV**, (968); **XV**, (946)
 A.R. Tanganyika Dep. Agric., 1939-1943, **XI**, (1054); **XII**, (1584); **XIII**, (1638); **XIV**, (2030)
 A.R. Tanganyika Dep. Agric. Specialist and Research Work, 1943, **XV**, 389
 A.R. Tea culture in Assam, 1940 and 1942, **XII**, (1584); **XV**, 276
 A.R. Tea Res. Inst. Ceylon, 1940-1943, **XI**, 1513; **XII**, 1574; **XIV**, 956; **XV**, 929
 A.R. Texas agric. Exp. Stat., 1939-1943, **XI**, 1049; **XII**, 334; **XIII**, (347); **XV**, 1363
 A.R. Trinidad and Tobago, Dir. Agric., Administ. Rep., 1940 and 1941, **XII**, 1160; **XIII**, (347)
 A.R. Tucumán agric. Exp. Stat., 1939-1942, **XI**, 649; **XII**, 721, 1583; **XIV**, 1450

SUBJECT INDEX

Annual Reports (*continued*)—

- A.R. Tung exp. Stat. Nyasaland, 1943, XIV, 1446
- A.R. Uganda Dep. Agric., 1940-1942/43, XI, (1054); XII, (1584); XIII, 1636; XIV, (2030)
- A.R. United Planters' Association of Southern India (Tea Scientific Section), 1942/43, XV, 390
- A.R. United Provinces Dep. Agric., 1938/39, XI, 1524
- A.R. Vegetable Res. Stat. Alnarp, 1939, XIII, 1090
- A.R. Venezuela agric. Exp. Stat., 1939, XIII, 669
- A.R. Vineland hort. exp. Stat., 1939/40-1941/42, XI, 1050, 1525; XIII, 670
- A.R. Wädenswil, etc., see Report Wädenswil
- A.R. Waite agric. Res. Inst., 1939/40 and 1941/42, XII, 336; XIV, 1452
- A.R. Washington agric. Exp. Stat., 1938/39, 1939/40, 1941/42, 1940/41, 1943/44 and 1942/43, XI, 1051, 1052; XIII, 671, 1098; XV, 945, (1366)
- A.R. Western Nut Growers Ass., 1943, XV, 941
- A.R. Zanzibar Dep. Agric., 1940-1943, XI, 1053; XII, 1163; XIV, 425, 2028
- Annulus zonatus* virus on red currant, XII, (1318)
- Ansatospira macrospora* on celery, XV, 2008
- Answers to growers. *John Innes Bulletin* No. 1, XV, 1345
- Ant(s)—
- the Argentine (*Iridomyrmex humilis*), XII, 1475; XIII, (562); XV, 103, 570
- black, on tobacco, XIII, 485
- ecological relationships of plants with, XIII, (115)
- leaf cutting, XII, (659); XV, 1923, 1924
- little fire, DDT to control, XV, 1898
- of tobacco seed beds, XV, 644
- Antestia* in coffee, XII, 1507, 1509, 1510; XIII, 594, 1519, 1636; XV, 286, 839, 840, 1942
- Antholcus varinervis* parasite of piri-piri, XIV, 954
- Anthocyanin in red cabbage, XIV, 1741
- Anthonomus*—
- eugenii* (pepper weevil), XIV, 1225
- piri*, XI, 766; XIV, 142
- pomorum*, see Apple blossom weevil
- signatus*, XIII, 432
- Anthracite coal ash as medium for cuttings, XIV, 1302
- Anthracnose of vine (*Gloeosporium ampelophagum*), XIV, 1143
- Antibacterial substances in green plants, XIV, 1129
- Antibiotic substance in *Eleocharis tuberosa*, XV, (1658)j
- Antigua Dep. Agric. A.R., 1939, XI, (1054)
- Antirrhinum*—
- cyclamen mite control on, XIV, (1662)
- diseases, XI, (1300)
- leaf spot (*Phyllosticta antirrhini*), XII, 270
- majus*, tetraploidy induced in, XIII, 241
- rust (*Puccinia antirrhini*), XI, 510, 1294; XII, 196, 1301; XV, 385
- soilless culture, XV, 1352
- Anychus* sp. in Argentina, XIV, 311, 591
- Aonidiella aurantii*, for detail see Citrus scale, red, XI, 527, 1332; XIII, (260), 558, (562), 1478-1481; XIV, 312, 313, 854, 855, (858), 1174, 1452, 1841-1845; XV, 1895, 1896
- Aphelechioides ribis*, XI, 1175

Aphelinus mali—

- in California, XV, 1040
- in Germany, XIV, 1617, 1618
- in India, XII, 450; XIII, 827
- in Kent, XIV, 1616
- in Sweden, XIV, 138
- in Switzerland, XII, 1162

Aphides—

- bean, rotenone tends to stimulate reproduction in, XV, 1836
- composition of cabbage and field beans affected by, XII, 164
- cube vegetable oil dusts for, XIII, 1349
- eggs, effect of carbolineum and petroleum emulsion on, XV, (599)
- galls, reaction of plant to, XIV, 597
- life history and control, XII, 868
- nicotine¹ for control, XIV, 1619, 1752
- rotenone-nicotine dusts for, XIII, 1350
- of Spain, XV, 1039
- on sugar beet in greenhouse, XIII, 888
- as vectors—
- of potato viruses, XII, 478, (982)
- of strawberry viruses, XII, 115, 116, 1305
- walnut (*Chromaphis juglandicola*), XV, 1600
- of the world, food plant catalogue, XII, 449
- Yezabura pyri* on pears in Sweden, XV, 104

Aphis—

- apple grain, XII, 869
- fabae*, XIII, 530
- gossypii*, XIV, 1752, 1753
- green apple, XII, 869
- melon, nicotine dust control of, XIV, 1752
- pomi*, use in evaluation of ovicides, XIV, 1646
- rumicis*, XV, (1071), 1836
- woolly—
- apple rootstocks immune to, XI, 1102; XIII, 797, 1094, 1291; XIV, 467; XV, 936
- control, XI, 1180; XII, 125, 450, 1162; XIII, 797, 827, 1293; XIV, 138, 1616, 1617, 1618; XV, 936, 1040, 1601, 1602
- infecting apple cores, XII, 1321
- parasites, see also particular parasites, XV, 1040, 1601

Apion—

- corchori*, XV, 1242
- ulicis* for gorse control, XIV, 954

Aplanobacter michiganense, XIV, 786*Apocheima pediaia*, XII, 1319*Apocynum cannabinum* or dogbane, a weed, XIV, 1634

Apoplexy—

- in apricot, XIV, 118
- in vine, XI, 72

Apple, see also Malus—

aphid—

- green, and apple grain, XII, 869
- woolly, see Aphis, woolly
- biennial bearing, XI, 402; XII, 74, 1264; XIII, 1191; XIV, 83, 86-89; XV, 977
- biochemical studies, XI, (737)
- bitter pit, XI, 720, 751; XII, 58, 103, 662, 1297; XIII, 379, 421, 1258, 1259; XIV, 1590
- bitter rot, XIV, 1606, (1662); XV, (598), 944
- black root rot (*Xylaria mali*), XIII, 106; XV, 560, 561, (598), 1030
- black rot—
- (*Phylospora obtusa*), XIII, 667
- (*Strasseria carpophila*), XIV, 133
- black spot, see scab

SUBJECT INDEX

Apple (*continued*)—

blister spot (*Phytophthora syringae papulans*), XV, 553

blossom—

induction in Wealthy, time of, XII, 1242
removal with sprays, *see also* thinning, XI, 402, (737); XII, 805, 1260, 1262, 1263; XIV, 86-89, 1080, 1536, 1537, (1545); XV, 64, 68, 493-495

sugars in, XV, 478

weevil (*Anthonomus pomorum*), XIII, 1284; XIV, 1610, 1653; XV, 1043, 1059, 1604, 1605

blossoming dates, XI, 1032; XIV, 58, 59, 1506, 1507

blotch (*Phyllosticta solitaria*), XV, 99

blotchy pit, XI, 720

borax—

advances maturity in, XII, 1253

for cork in, XI, 1151

boron—

deficiency, XI, 70, 1151, 1512; XII, 662, 1266; XV, 85, 89, 532, 1019, 1021, 1550-1552
toleration limits, XIV, 1573

Botrytis cinerea on, XI, 76, 1162, 1171; XII, 439, 857, 858, 1302; XIII, 1275

breeding, *see also* seedlings and varieties—
early and midseason dessert, in England, XIV, 1484

for hardness, XII, 1288; XIII, 1145, 1148, 1150; XIV, 52, 483-485, 1484; XV, 973, 1352

for red spider resistance, XV, 1042

for scab resistance, XIV, 52; XV, 97

in Switzerland, XV, 1419, 2079

brown core in stored, XIII, 1559

brown rot (*Sclerotinia* spp.), XV, 1032, 1619, (1659)d

bud mutations, XII, 40; XIII, 720; XIV, 506; XV, 443

buds, vegetative, winter growth, XI, 397

burrknots, *see* hairy root

bush, cultivation in North Russia, XI, 387

butter production, XV, (1336)

by-products, XII, 696; XV, 2013

calyx end injury, XIII, 95

canker diseases, XIV, 1138; XV, 1031

canker-like disease, *Myxosporium mali*, XIII, 1274

canning, XI, 303, 1472

capsid (*Plectocoris rugicollis*), XI, 1175, 1183

ease bearer (*Coleophora malivorella*), XII, 454; XIV, 1160

cedar rust control, XIV, (1662); XV, 1053

chat fruits in Lord Lambourne, XV, 549, 935, 1024

chimera, Sweet and Sour, XV, 442

Chinese, *see* *Malus prunifolia*

cider, *see* Cider

clones—

root types among, XIV, 49

variation in, XIV, 506

codling moth on, *see also* Codling moth, XI, 769, 770; XIII, 1633; XIV, 602, 1610, 1625; XV, 1616, 1619

cold resistance—

tests, XI, (779)

varieties, XI, 1095

collar rot (*Phytophthora cactorum*), *see* crown rot

colour—

affected by borax, XI, 52

Apple colour (*continued*)—

increased by sprays, XII, 809; XIV, 521

composition, sugar analysis, XIV, 402

consumer demand in eastern U.S.A., XIV, (1545)

cordon growing, XIII, 49; XIV, 1479; XV, 1000

cork in, XI, 255, 1151

corky core, XII, 434; XV, 89

costs in Washington State, XIII, 1205

cover crops affect root growth, XII, (826)

crispness lost by excessive storage, XI, 1449

cropping twice yearly, XIV, 520

crown rot, *Phytophthora cactorum*, XII, 1227; XIII, 104; XV, 96

culinary varieties, *see* varieties

cull, utilization, XII, 696; XIII, 650; XIV, 392; XV, (1336)

cultivation trials, *see* soil management

cuttings, XII, 1223; XIII, 730, 1098; XIV, 494; XV, 939, 945

deficiency symptoms, *see also* particular deficiencies, XI, 720, 721; XIII, 1248; XV, 86, 531

dehydration, *see* drying

dieback (*Gloeosporium* spp.), XII, 1316

dipping to preserve, *see also* Storage dips, XI, 1450, 1459; XII, 1104; XIII, 303, 1039; XIV, 368, 1378, 1379, 1940; XV, 68, 1303, 2003, 2004

diseases in Massachusetts, XII, (880)

double working for frost resistance, *see also* rootstocks, intermediate, XI, 400, 709, 710, 748; XII, 424, 427, 428, 1289; XIII, 737; XIV, 55, 420, 499, 1440; XV, 1440

drought injury, XIV, 1586

dry eye rot (*Botrytis cinerea*), XII, 858; XIII, 1275

drying technique, XI, 1472, 1481; XII, 1123; XIII, 1059, 1597; XV, 383, 900

dwarf trees, *see* rootstocks, dwarfing

early bearing of Siberian, XIV, 1501

economics, budget method of analysis, XII, 1215

ensilage, XII, 696

eye rot, associated with *Botrytis cinerea*, XI, 76, 1162, 1171

false sting virus, XI, 425; XIII, 1261

for feeding livestock or poultry, XII, 696; XIII, 650; XIV, 392

fertilizers, *see also* manuring—

injury from calcium cyanamide, XIV, 1515

and leaf composition, XV, 482

and storage quality, XV, 483

Uramon in spray form, XIV, 72

filler trees, XIV, 1480

fireblight, *Erwinia amylovora*, XI, 1164, 1165; XV, 550

flat limb virus, XIII, 1261; XV, 549

flower bud initiation not influenced by growth substances, XIV, 1534

flyspeck, (*Leptothyrium pomi*) XII, 441; XV, 95

food value, *see also* vitamin, XIII, 1574

frameworking, XII, 379, 380; XIII, 47; XV, 1019

frog eye leaf spot (*Sphaeropsis malorum*), XIV, (547); XV, 1358

frost—

injury and resistance, XI, 418-420, 747-749;

XII, 371, 424, 429, 432, 1285-1292;

XIII, 380, 1096, 1239; XIV, (161), 483,

1578, 1584, 1585, 1586; XV, 1550, 1552

SUBJECT INDEX

Apple, frost (*continued*)—

- protection by double working, *see* double working
- protection by growing horizontally, **XII**, 820, 843; **XIV**, 41, 81
- resistance, **XIII**, 380, 1096; **XIV**, 483
- susceptibility in England, classification for, **XII**, 845

fruit—

- bud formation, **XI**, 396
- buds, size related to set, **XIV**, 60
- colour and susceptibility to rot, **XII**, 853
- development, **XII**, 62; **XIII**, 54
- drop—

- anatomical and chemical aspects, **XIV**, 507

June, **XV**, 1543

- premature, prevention of, **XI**, 735, 1126; **XII**, 76, 77, 79, 395-397, 804-807, 809, 810, 1156, 1266, 1267; **XIII**, 667, 670, 765-767, 1194-1200; **XIV**, 522, 1540-1542; **XV**, 69-71, 594, 973, 1019, 1487-1492

- as varietal character, **XV**, 481

fly, *see* Apple maggot

miner (*Argyresthia conjugella*), **XIII**, 831

morphology, **XI**, 48; **XIII**, 54

rot infection affected by colour of fruit, **XII**, 853

set—

- affected by growth regulators, **XIV**, (92).
- spraying to prevent, *see* Apple thinning
- skin structure in Golden Delicious, **XV**, (505)
- tissue fluorescences under ultra-violet light, **XV**, (1336)
- transpiration, character of skin in relation to, **XIV**, 1509

fumigation effects of methyl bromide, **XV**, 871, 872, 1359

fungicides, organic, **XV**, 584

grafting—

in Nova Scotia, **XI**, (737)

position of scion affects success, **XI**, 715

grafts—

Rhizoctonia disease of, **XIII**, 816

scion rooting, **XIII**, 1169

grey mould (*Botrytis cinerea*), *see also* Apple *Botrytis cinerea*, **XI**, 76, 1162; **XII**, 439

growing—

in Argentina, **XIV**, 467

in Canada, **XV**, 1409

"column with laterals" system, **XV**, 999

in Cyprus, varieties for, **XI**, 1025

economics in U.S.A., **XII**, 1215; **XIII**, 1205

in England—

dessert, **XIV**, 1057

intensive, **XV**, 467

manual, **XIV**, 949

in Kumaun, vegetative propagation, **XI**, 1101

in New Jersey, **XIII**, 715

in New South Wales, **XV**, 435

in Ohio, blossoming time and yields, **XII**, 56

in Okanagan Valley, **XV**, 977

in Orel Territory, U.S.S.R., American varieties, **XIV**, 474

in Prince Edward Island, **XIII**, 712

in sand culture, N and P effect on, **XII**, 399

in S. Africa, Langkloof Valley, **XV**, 436

in United Provinces, India, **XI**, 1524

Apple (*continued*)—

growth—

black walnut in proximity hinders, **XIII**, 1637

: crop relations, **XII**, 65, 392

differences, reasons for, **XIV**, 960

measurements, **XII**, 63, 64; **XV**, 1450

regulators and fruit set, **XIV**, (92)

sulphur sprays affect, **XII**, 137

grubbing, toxic spray residues found after, **XV**, 1458

hail injury, **XIV**, 1578

hairy caterpillar (*Lymantria obfuscata*), **XV**, 578

hairy root, non-infectious, **XI**, 714; **XIII**, 1170; **XV**, 460

hardiness—

in Germany, **XIII**, 87

soil conditions and, **XII**, 97

selection or breeding for, **XII**, 1288; **XIII**, 1145, 1148, 1150; **XIV**, 483-485; **XV**, 973, 1352

heart rot of tree (*Diplodia*), **XII**, (1318)

interval between flowering and fruit maturity, **XII**, 1240, 1241

irrigation, **XII**, 825; **XIII**, 671, 751

juice—

ascorbic acid retention by, **XIV**, 1408

bacterial life in, **XIII**, 1074

blending, **XV**, 895

clarification, **XV**, 895

clouding and sedimentation in, **XIV**, 1986; **XV**, 2047

composition, relation of yeast multiplication to, **XIII**, 314

concentrates or concentration, **XI**, 628, 989; **XII**, 1147; **XIII**, 315; **XIV**, 1410, 2025; **XV**, 372

filtration affects, **XIV**, (2003)

flavour retention, **XV**, 896

freezing and thawing alternately as means of preservation, **XIV**, 1409

manufacture, **XI**, 297, 625-627, 987, 989, 1467, 1468; **XII**, 677, 1113, 1147; **XV**, (1336), 1409, (2059)d

Phialophora mustean on, **XIV**, 1108

precipitation, prevention of, **XIV**, 388

preservatives, **XII**, 1551

residue disposal, **XIV**, 390

varieties suitable, **XV**, 1422

vitamin C addition to, **XII**, 1552; **XIII**, 1073, (1087)

leaf—

areas, sampling for chemical analysis, **XIV**, (1545)

composition, fertilizers and, **XV**, 482

development and structure, **XV**, 477

diagnosis, **XII**, 1252

enzyme systems of, **XII**, 1237

fall, premature, **XII**, 840

and fruit spotting (*Elsinoe piri*), **XV**, 1579

hoppers (*Typhlocyba* spp. and others), **XI**, 1175; **XIII**, 112; **XIV**, 592, 1622

K content affected by mulching, **XIV**, 75

miner (*Lyonetia clerkella*), **XV**, 1625

respiration, soil moisture and, **XI**, 1111

roller, **XII**, 869

scorch, **XII**, 1250

spray effects on, **XIV**, 1650

transpiration, soil moisture and, **XI**, 1111

variegation, a virus, **XI**, 424

yellowing, premature, **XV**, 90

SUBJECT INDEX

Apple (continued)—

little leaf, in Queensland, XV, 1548
 maggot (*Rhagoletis pomonella*), XI, 768, 769;
 XII, (462); XIII, 829; XIV, 1154; XV, 973
 magnesium deficiency, XI, 50, 71, 752, 1512,
 1518; XIII, 1092, 1255, 1256; XIV, 562,
 954, 1574, 2025; XV, 86, 372, 533, 1002,
 2075
 manuring, XI, 50, 721, 724, 1512, 1518; XII,
 1248, 1250; XIII, 344, 749, 750, 751, 1183,
 1633; XIV, 72, 954, 1513, 1515, 2025;
 XV, 59, 372, 1002, 2075
 marketing—
 in Illinois, XIV, 527
 at Los Angeles, XII, 828; XIII, 68, 402
 at New York and Chicago, XIII, (69)
 mealliness, reasons for, XII, 1519
 mealybug—
 (*Phenacoccus aceris*), XIII, 111; XV, 973
 (*Pseudococcus comstocki*), XIII, 1292;
 XIV, 1160
 measles, XIII, 1637; XV, 1021
 medicinal value, XI, 986
 mentor effect on, XI, 384
 metabolism of stored Granny Smith, XIV,
 1937
 metaxenia, XII, 55
 mildew (*Podosphaera leucotricha*), XII, 445;
 XIII, (429)
 mites on, XI, 1176; XIV, 1625
Monilia rots, XII, 443; XV, 562, (1659)c
 mosaic virus, XIII, 1261; XIV, 1124; XV,
 92, 549
 moth control by tobacco smoke, XIV, 603
 mottle leaf virus, XIV, 1124
 mouldy core connected with *Alternaria* spp.,
 XIII, 107
 under the mulch system, see soil manage-
 ment
 New Zealand, vitamin C content, XIV, 1041
 nitrogen—
 intake at low temperatures, XIV, 70
 translocation in hybrid, XIV, 508
 N P K relations in young, XIII, 1182
 nutrition, bulletin on, XI, 720
 nutritional trials, importance of date of
 sampling, XIV, 71
 oil dip to preserve, see dipping
 orchard, renovation of neglected, XIII, 1179
 origins of cultivated, XV, 975
 own rooted trees, root systems of, XV, 54
 packing, XI, 969, 970; XII, 274, 661; XIV,
 1377, 2025; XV, 866, 934, 1359, 2077
 papery bark, XIII, 1273; XIV, 1600
 parthenocarp induced in, XV, 1809
 perennial canker (*Gloeosporium perennans*),
 XIV, 132; XV, 563
 pests—
 in Connecticut, control, XIII, 1285
 in Massachusetts, XII, (880); XV, (1658)c
 in Pennsylvania, XIII, 110
 and petroleum oil sprays, XV, 593
 phenological observations on, at Geisenheim,
 XI, 395
 photosynthesis, XI, 1111; XIII, 55; XIV, 62;
 XV, 1634
 picking times, XII, 1269; XV, 69
 pink disease (*Corticium salmonicolor*), XIV,
 1604; XV, 95
 pistol case bearer (*Coleophora malivorella*),
 XII, 454; XIV, 1160
 pitting disorders, XII, 662

Apple (continued)—

planting—
 considerations when, XV, 1457
 dates in Krasnojarsk, XIV, 35
 depth, XIV, 459
 distances, XIV, 1480
Pleospora disease, XV, 1575
 pliofilm checks moisture loss in, XIV, 368
 pollination, XI, 45, 716, 1105; XII, 389,
 1234; XIII, 665, 1173; XIV, 58; XV, 40
 polyploidy, see also tetraploid—and winter
 hardness in, XIII, 389
 pomace, XI, 990; XII, 696; XIII, 1075, 1076;
 XIV, (2003)
 potassium deficiency, XI, 721; XV, 86
 powder, XIII, 1050
 price changes, XII, (829)
 processing, XIII, 313, 1574; XIV, 391; XV,
 1409, 2013
 propagation—
 in Chile, XV, 460
 at Kumaun, XI, 1101
 pruning, XI, 56, 57, 729, (737), 1016; XII,
 810, 1257; XIII, 59, 759, 1095; XIV, 79,
 510, 1526, 1527; XV, 502, 922, 1460
 quality assessment of stored, XIII, 1035
 quince rust on, XIV, 1137
 -raspberry juice, XI, 991
 red spider, breeding for resistance to, XV,
 1042
 respiration, see also leaf respiration and
 storage, XII, 276, 398; XIII, 391
 ringing, XI, (737); XII, 70, 824; XIII, 1095;
 XIV, 83, 459, 509; XV, 501
 ripe spot (*Neofabraea malicorticis*), XII, 1317;
 XIV, 580, 1605
 ripeness, determination, XI, (737)
 ripening—
 period necessary for, XII, 1240, 1241
 spectral analysis of, XIV, 1938
 root—
 borer (*Lophosternus hugelii*), XII, 452
 cuttings, XIV, 494
 grafted, wiregridding in nursery, XV, 501
 growth, XI, 711; XII, 54, 385, (826);
 XIV, 49; XV, 54
 regeneration after frost, XIV, 1584
 scion influences frost resistance of, XI, 748
 submersion affects photosynthesis, XIII, 55
 and soil management, XV, 489
 types among clones raised from cuttings,
 XIV, 49
 rootstocks—
 Amelanchier vulgaris as, XIV, 48
 anatomical structure, XI, 42, 1102; XV,
 1444
 Anis, XV, 993
 in Argentina, XIV, 467
 in Australia, XII, 1146; XIII, 1630; XV,
 1348
 Beautiful Arcade, XV, 993
 burr-knots in, XI, 714; XIII, 1170; XV,
 460
 in Canada, XIV, 2019
 for cider varieties, XII, 796; XIII, 738;
 XIV, 1478
 Clarke's Dwarf, XV, 1352
 clonal 316, XIV, 1498
 cold resistance, XI, 387, (737), 748, 749;
 XII, 99, 424, 429, 1155, 1156, 1289;
 XIII, 383; XIV, 479, 1584; XV, 948
 Conference at Geneva, N.Y., 1940, XI, 43

SUBJECT INDEX

Apple rootstocks (*continued*)—

- for cordon cultivation, **XV**, 467
- for Cox's Orange Pippin, in Sweden, **XV**, 979
- crown gall control on, **XV**, 1568
- diploid and triploid seedling, **XI**, 713
- Dolga Crab, **XV**, 1352
- drought-resistant, **XII**, 48
- dwarfing, *see also* rootstocks, Malling, **XI**, 714; **XIII**, 734, 735, 738; **XIV**, 498, 1054; **XV**, 1352
- for English conditions, **XIV**, 34
- in France, **XV**, 994, 995
- French crab, **XIII**, 736, 1165, 1166, 1168, 1171; **XIV**, 1500
- frost resistance in, *see* cold resistance
- in Germany, **XIV**, 496, 1584
- hairy root, non-infectious, in, **XI**, 714; **XIII**, 1170; **XV**, 460
- hardy, *see* cold resistance
- Hibernal, **XII**, 1227; **XIII**, 383, 1155; **XIV**, 420; **XV**, 1352
- incompatibility, **XIV**, 1499; **XV**, 470
- in India, **XI**, 1033; **XIII**, 1094; **XIV**, 961; **XV**, 936
- intermediate, **XI**, 400, 709, 710, 748; **XII**, 424, 427, 428, 1229, 1289; **XIII**, 383, 737, 1168, 1171; **XIV**, 55, 420, 499, 1440, 1497; **XV**, 468, 469, 1440
- Ivory's Double Vigour, **XV**, 2075
- Jonathan seedling, **XIV**, 1498
- Malling—
 - at Geneva, U.S., **XI**, 708; **XII**, 51, 52; **XIII**, 1171; **XIV**, 1496; **XV**, 939
 - in Germany, **XI**, 386; **XII**, 1289; **XIV**, 496, 569
 - No. II, growth of dessert fruit on, **XIV**, 1057
 - in India, **XI**, 1033; **XIII**, 1094; **XIV**, 961; **XV**, 936
 - identification, **XIV**, 497
 - in Maryland, **XIII**, 1169
 - new varieties of, **XIII**, 1164
 - in Nova Scotia, **XV**, 993
 - for ornamental crabs, **XI**, 1288, 1289
 - in Pennsylvania, **XII**, 719
 - in Sweden, **XIV**, 498
 - IX in Switzerland, **XII**, 53
 - XVI, thorniness in, **XIV**, 1053
 - in U.S.A., **XI**, 708; **XII**, 51, 52, 719, 795, 1228; **XIII**, 736, 1166, 1169, 1171; **XIV**, 1496; **XV**, 939
 - in West Virginia, **XIII**, 1166
 - at Vineland, Ont., **XIII**, 1165
- Malus prunifolia*, **XI**, 387; **XII**, 424; **XIV**, 459, 479
- Malus pumila*, **XIV**, 475
- Merton—
 - in Australia, **XV**, 1348
 - in India, **XIII**, 1094; **XIV**, 961; **XV**, 936
 - in New Zealand, **XIII**, 344; **XIV**, 50, 954, 2025; **XV**, 372, 383, 2075
- Northern Spy, **XIV**, 1499; **XV**, 470, 2075
- Photinia lindleyana* unsuccessful as, **XI**, 1033
- Pirus baccata* as, **XII**, 384
- Rosellinia* resistant, **XIII**, 1094
- in Russia, **XI**, 387; **XIV**, 51
- scion resistance, raising for, **XIV**, 52
- scion influence on, **XII**, 49, 50
- seedling, **XI**, 713, (737); **XIV**, 1055, 1498
- Spy 227, **XIV**, 1499; **XV**, 470

Apple rootstocks (*continued*)—

- stoolbeds, rooting affected by soil moisture and temperature, **XI**, 386
- storage quality affected by, **XIV**, 2019, 2020
- in Sweden, **XIV**, 498; **XV**, 466
- training horizontally, **XIV**, 41, 81
- U.S.D.A. clones, various, **XIII**, 1166
- U.S.D.A. T-200, **XIV**, 1500
- U.S.D.A. 227, **XV**, (505)
- Virginia crab, **XII**, 1227; **XIII**, 383, 1155, 1156, 1168; **XIV**, 420, (1545); **XV**, 469, 1352
- wind damage, **XI**, 750
- woolly aphid immune, **XI**, 1102; **XIII**, 797, 1094, 1291; **XIV**, 467, 961; **XV**, 936
- rubbery wood in Lord Lambourne, **XV**, 549, 935, 1024, 1561
- russeting, spray damage and, **XV**, (599)
- rust, legislation and control, **XIV**, 129, 1137, (1662)
- sawfly (*Hoplocampa testudinea*)—
 - in America, first appearance, **XIII**, 1305
 - in England, **XIV**, 1610; **XV**, 1051
- scab (*Venturia inaequalis*) and control, **XI**, 427, 428, 758, 770; **XII**, 432, 444, (462), 854-856, (1318), 1325; **XIII**, 119, 444, 667, 817, 1095, 1097, 1276, 1277; **XIV**, 52, 116, (161), 484, (547), 579, 616, 617, 1136, 1137, (1184), 1451, 1601, 1602, (1662); **XV**, 97, 98, 559, (598), 943, 973, 1029, 1053, 1576, (1658)b, 2077
- scald—
 - effect of storage treatments on, **XIII**, 303
 - superficial, **XI**, 253; **XII**, 1521
- seed oil, **XI**, 1503
- seedlings—
 - immune to woolly aphid, *see* rootstocks, woolly aphid immune
 - woolly aphid immune
- McIntosh, **XIV**, (1545)
- of Rome Beauty, Gallia Beauty and Golden Delicious, **XII**, (1246)
- shoot growth inhibited by growth substances, **XIV**, 1533
- silver leaf (*Stereum purpureum*), **XIII**, 1273; **XIV**, 1600
- size and colour, factors affecting, **XII**, 393
- soft rot (*Penicillium expansum*), **XII**, 663; **XV**, 95
- soil—
 - management, **XI**, 727, 1050, 1119, 1525; **XII**, 1255; **XIII**, 749; **XIV**, 73-75, 1077, 1521; **XV**, 489, 1352
 - surveys in Ireland, **XIII**, 1178
- somatic variations, *see* bud mutations
- sooty blotch (*Leptothyrium pomi*), **XII**, 441; **XV**, 95
- spacing, **XV**, 977
- Sporonema* rot, **XIV**, 1942
- spray—
 - apparatus affects coverage, **XIV**, 150
 - calendar for Nova Scotia, **XV**, (1071)
 - injury, **XIII**, 95; **XIV**, 1650
 - injury and pre-harvest drop, **XV**, 594
 - lime-sulphur v. flotation sulphur, **XII**, 1337
 - programme in N. Zealand, **XII**, 885
 - residues, **XI**, 777; **XIII**, 124, (125), (451)
- spraying—
 - colour increased by, **XII**, 809; **XIV**, 521
 - fruit set prevented by, *see* Apple thinning
 - growth and yield affected by, **XIII**, 443
 - pre-harvest drop prevented by, *see* Apple fruit drop

SUBJECT INDEX

Apple (*continued*)—

stalk end rot (*Phoma* and *Botrytis cinerea*),
XII, 857, 1302

stem—

black (*Coniothecium chomatosporum*), XV, 95
brown disease (*Botryosphaeria ribis*), XII,
1313; XV, 95

builders, *see* rootstocks, intermediate

Stemphylium disease, XV, 1575

stimulatory effect on one another in store,
XIV, 367

storage—

in Australia, XI, 252, 611; XII, 1146, 1147;

XIII, 1037, 1039, 1555, 1556, 1630;

XIV, 1378, 1379, 1937; XV, 369

in Canada, XI, 970; XII, 660, 661; XIII,
1038, 1557, 1558; XV, 1300

cellophane containers used in, XI, 970;
XII, 661

common or cellar, XI, 612; XIII, 1034,
1035, 1555

construction for farm, XV, 868

cooling prior to, XIII, 302

gas treatment prior to, XV, 2077

crispness affected by, XI, 1449

disease, *Gloeosporium album*, XIV, 1606;
XV, 944

disorders, XI, 255; XII, 660, 662, 663;
XIII, 1036, 1559

in England, XI, 1522

in Germany, XIV, 908

in India, XI, 252; XII, 663; XIII, 1554

maturity determination by spectral analysis,
XIV, 1938

in New Zealand, XI, 150, 254, 1448, 1512,
1518; XIII, 344, 1633; XIV, 2025; XV,
2075

orchard in New Zealand, XI, 1448, 1512

quality—

boron and, XI, 69, 254, 1512; XIII,
1038, 1558

cultural practice and, XII, 660, 1519;
XIII, 1557; XV, 2075

factors affecting, XI, 69, (984); XII, 1519

oil sprays and, XV, 873

packing and, XII, 661

refrigerated and/or gas, XI, 250, 252-254,

264, 611, 612, 970, (984), 1448, 1449,

1512, 1518; XII, 276, 277, 660-664,

1097, 1146, 1147, 1519-1524; XIII,

302-304, 344, 1033, 1036-1039, 1554-1559,

1630, 1633; XIV, 367, 368, 905-908,

1378, 1380, 1936-1942, 2025; XV, 68,

369, 937, 973, (2011)a, 2075

respiration during, XI, 276

in Russia, XIII, 1034, 1035

in S. Africa, XI, 253; XII, 1521

spraying affects, XIII, 839

Swedish trials, XIV, 905; XV, 1301, 1999

Swiss work, XII, 664, 1097, 1098; XIV,
1441; XV, 944, 1996, 1997

in U.S.A., XI, 277; XII, 1519, 1520, 1523,
1524; XIII, 303, 304, 1036, 1559; XIV,

367, 368, 1936, 1938-1942; XV, 68, 937,
973

vitamin C content affected by, XII, 669;
XIV, 1939; XV, 1302

volatile products in, XII, 1522, 1523; XIV,
906, 1941

waxes for use in, *see* Apple dips

sucker (*Psylla mali*), XII, 1319; XIII, 1290

sulphur susceptibility, XI, 778

Apple (*continued*)—

sunburn, XIII, 1244

sunscald, XIII, 92, 1243; XIV, 1578

syrup, production of bland, XIII, 315; XIV,
1987

Swedish imports of, XV, (505)

tetraploid, new, from Sweden, XIII, 665, 718,
1144; XIV, 486, 487; XV, 447-450

thinning—

of blossom and fruit, XI, 402, 732, 733,
(737); XII, 805, 1260, 1262, 1263;

XIII, 745, 746; XIV, 86-89, 1080, 1536,
1537, (1545); XV, 64, 65, 68, 493-495,

1019, 1359, 1465, 1466

out trees, XII, 762

topworking, *see also* frameworking, XI, (737)

training—

by "arcure" method, XIII, 50

column with laterals system, XV, 999

cordon, XIII, 49; XIV, 1479; XV, 1000

dwarf pyramids, XV, 1451

horizontal, XII, 843; XIV, 41, 81

in the Urals, XIV, 82

transpiration varies with stage of develop-
ment, XIV, 63

transplanting, XV, 67

treacle, XI, 989; XII, 1116

tree borer, flat-headed (*Chrysobothris femor-
ata*), XV, 106

trees—

nitrogen and carbohydrate distribution in,
XIII, 53

production of small, early bearing, *see also*
rootstocks, dwarfing, XIV, 1054

triploid, fertility, XIV, 1064

trunk diameters on clonal rootstocks, XII,
1228

variation, narrow leaf, XII, (1246)

varieties—

American, in Russia, XIV, 474

for Australia, XV, 1423

Bramley's Seedling, XV, 441

Chinese, a weeping form, XIV, 41

cider, XV, 980

the Close, XIII, (727)

Cox's Orange Pippin, its origin, XIV, 38

Cox's Orange Pippin in Sweden, XV, 979

culinary, English, XI, 1096

culinary quality of New York, XIV, 1042

in Cyprus, XI, 1025

Delicious—

bitter pit in Golden, XIII, 379

factors affecting quality, XII, 1519

pollenizers for, XII, 1234

Ellison's Orange, its origin, XV, 978

English, XV, 41, 921, (1006)

in France, XV, 994

in Germany, XIV, (528)

good keeping, XV, 446

Haralson, unusual case of frost injury to,
XII, 1290

hardy, Baškirski Krasavec, XIV, 40

hardy, at Kapuskasing, Ont., XIII, 663

Idared, XV, 1424

Ingrid Marie, XIII, (727)

Jonathan, colour and palatability of cooked,
XV, (2059)j

Jonathan pectic changes during storage,
XII, 1520

for juice production, XV, 1422

in Krasnojarsk, XIII, 1149; XIV, 39

Lord Lambourne, XV, 549, 935, 1024, 1561

SUBJECT INDEX

Apple varieties (*continued*)—

- McIntosh, XIV, (1545)
 in Massachusetts, XII, 783
 Mičurin's frost resistant, XIII, 380
 Mičurin, testing of, XIII, 717
 in New Zealand, XV, 2075
 of the North Urals, XI, 1095
 Northern Spy, pollination, XI, 716
 in Quebec, XI, 701
 Reinettes of Krasnojarsk zone, XIII, 1149;
 XIV, 39
 Russian, XIV, 51
 for Siberia, a new, XIII, 1150
 Siberian, XIV, 1501
 the Spässerud, XIV, 1040
 Stark, russeted sport of, XV, 443
 Swedish, XIV, 471-473, 1039, 1040; XV,
 913
 Sweet and Sour, XV, 442
 for Switzerland, XII, 1154; XIV, 1036;
 XV, 1429
 tetraploid and other high chromosome,
 XIII, 389, 665, 718, 1144; XIV, 486,
 487; XV, 447-450
 in the Trans-Urals, new, XIII, 1147
 in U.S.A., XII, 41, 42; XIV, 37, (1545)
 Winesap, seasonal growth, etc., XII, (1246)
 Yellow Newtown, gas storage, XII, 1524
 vigour undetermined in second year, XIV,
 1508
 viruses, XI, 424, 425; XIII, 1261; XIV, 1124;
 XV, 92, 549, 935, 1024, 1561
 vitamin C in, XI, 404; XII, 669, 784; XIII,
 38, 39; XIV, 406, 922-924, 1041, 1440,
 1485, 1939, 1961; XV, 372, 2075
 water core, XIV, 119
 waxing to preserve, *see* dips
 weevil, *Dyslobus tanneri*, XI, (1187)
 wire girdling in nursery, XV, 501
 wood decay in, XII, 419
 woolly aphid (*Eriosoma lanigerum*), *see also*
 Aphid, woolly, control—
 immune seedlings and rootstocks, XI,
 1102; XIII, 797, 1094, 1291; XIV, 467;
 XV, 936
 yield—
 adjustment for different sizes of tree, XI,
 403
 factors affecting, in Okanagan Valley, XV,
 977
 from trial plots at East Malling, XIII, 1202
 zymosis in HCN treated, XII, 1099

Apricot—

- apoplexy, XIV, 118
 a bacterial disease, XV, 556
 boron—
 deficiency in, XII, 104
 toxicity symptoms, XI, 728
 brown rot (*Monilia cinerea* and *M. fructigena*),
 XII, 1310, 1311
 brown spotting, borax for, XI, 1518
 codling moth control in, XV, 1045
 composition of Hungarian, XIV, 405
 curly leaf disease, XIV, 555
 death—
 causes of early, XIV, 1568
 from unknown causes, XII, 1298
 dieback due to *Monilia* spp., XIV, 1139
 disease control, XIII, 1280
 drying, XI, 308, 1473; XII, 683; XIV, 1415,
 (1431); XV, 339
 forms, young and mature, XI, 394

Apricot (*continued*)—

- fruit—
 bud formation, XI, 396
 fall, XII, 1265; XIV, 68
 growing—
 in low temperature regions of Japan, XII, 47
 in Tasmania, XIII, 714
 gummosis (*Coryneum beijerinckii*), XV, 565
 harvest date forecasting, XV, 480
 host of potato virus, XII, 477
 juice processing, XIII, (335)
 kernels, debittering, XIII, 318
 kernel oils, XV, 357
 leaf scorch and dieback, XIV, 120
 little leaf disease, XI, 421
 manuring, XII, 80
 pests, XIV, 587
 pollination, XII, 389; XV, 476
 pruning, XIV, 511; XV, 65, 66
 ring spot virus, XII, 850
 rootstocks for, XIII, 740; XIV, 496; XV, 471
 of short chilling requirements, XI, 705
 soil management, XIV, 511
 spotting by *Bacterium pruni*, XI, 755
 storage, XI, 971; XV, 945
 sulphuring, effects of, XIV, 1415
 thinning, XV, 1468
 varieties, XIII, 723; XV, 444
 wild, in the Alma Ata region, XIII, 723
Apterygida albipennis, XII, 1319
Arabia Felix and its drug plants, XIII, (267)
Araceae of Fernando Po, XV, 933
Arachis, *see also* Groundnut—growth, day length
 affects, XIV, 1105
Arachnida, parasites of, XIV, (1185)
Araucaria excelsa, essential oil of, XII, (311)
Archangelica officinalis, XII, 1400
 Arctic—
 plant food production, XV, 602
 plants, vitamin C content, XV, 2019
Arctostaphylos uva-ursi, leaf biochemistry, XV, 1740
 Arcure, a method of training, XIII, 50
Areca catechu, XI, 1398; XII, 692
 Argentina—
 agriculture in, XII, 731
 apple growing, XIV, 467
 floriculture in, XIV, 1299
 fruit production, XII, 781
 fruit exports and production areas, XIII, 769
 Minist. Agric., A.R. Hort. Dep., 1940 and
 1941, XIII, 1091
 peach growing, XIV, 469
 peach and plum varieties, XV, 365
 possible rubber production in, XIII, 1386
Argyresthia—
conjugella, mountain ash a host plant for,
 XIII, 831
nitidella, XII, 1319; XV, 1626, 1627
Argyroploce—
leucotreta, XIII, (982); XIV, 631
pruniana, XIII, 832
Argyrotaenia citrana, XII, 1476, XIV, 1847
Aristotelia cultivation, XIV, 1237
 Arizona agric. Exp. Stat. A.R., 1939/40 and
 1942/43, XI, (1054); XIV, 1436
 Arkansas agric. Exp. Stat. A.R., 1939/40-1942/43,
 XI, 1017; XV, 2071
 Armenia, fruit diseases in, XV, 528
Armillaria—
mellea incidence, XII, 1302
 root disease, ring barking as preventive, XI,
 197

SUBJECT INDEX

- Armillaria* (continued)—
 root rot of citrus, XV, 1209
 root rot in Eastern U.S.A., XIV, 130
 Aromatic substances in fruit, XIII, 1576
 Arrowroot (*Maranta arundinacea*)—
 the Banana variety of, XI, 1047
 planting and cultivation, XI, 567; XIII, 1510
 Arsenate in soil affects vegetables, lead, XIII, 1338
 Arsenic—
 contaminated soils, cultivation of, XV, 76
 content of vegetables from lead-arsenate
 sprayed ground, XIV, 1679
 injury to peach trees, XIII, (845); XV, 118
 spray injury reduced by lime, XV, 118
Artemisia—
absinthium cultivation, XIV, 713
cina a source of santonin, XV, 174
 Artichoke—
 globe—
 cultivation in Algeria, XV, 1151
 cultivation in Palestine, XI, 112
 Jerusalem—
 cultivation—
 in Algeria, XV, 1144
 in Palestine, XI, 112
 in Russia, XIV, 736
 ensiling, XI, 467
 fermentation of, XI, (1506)
 mentor work with, XII, 760, 762
 necessity of cold for, XII, 953
 shoot development arrested, XIV, 735
 soil temperature and, XV, 145
 storage, XIV, 735
 sugar from, XIII, 333
 syrup, XII, (1560)
 tuber formation affected by photoperiod
 and pruning, XIV, 995
Artocarpus—
incisa propagation, XI, 1038; XV, 1976
integer, XI, 313
integrifolia, XIII, 1509
Asclepias—
cornuti, XV, 56
incarnata, a fibre and bee plant, XII, 530
 spp.—
 rubber hydrocarbon in, XIV, (412)
 as source of rubber—
 in Australia, XV, 1348
 in Canada, XV, 677, 926
 in Iowa, XIV, 1440
 in Poland, XIV, 204
syriaca seeds, oil from, XV, 1126
Ascochyta spp.—
 diseases of *Hibiscus* spp., XIII, 1031
 infecting pea pods and seed, XI, (821); XII,
 1446
Ascogaster quadridentatus, XIV, 954
 Ascorbic acid, *see also* Vitamin C—
 in citrus leaves, XV, 1870
 determination, XIV, (1431), (2003); XV,
 (2059)
 in Douglas fir needles, XV, (431)
 manganese essential to synthesis of, XIV, 1407
 in mango, XV, 1977
 nitrogen ratio in grapefruit, XIV, 1319
 oxidase, XV, (2059)
 in turnip greens affected by light, XIV, 996
 value, maceration affects, XV, 2028
 Ash—
 determination in plants, XII, 22
 of fruit products, chlorine in, XIII, 1585
 as manure for fruit trees, XII, 400
 Ashanti, Gold Coast, A.R. on Agriculture, 1943/44,
 XV, 368
Asimina triloba hybrids, XI, 1097
 Aslib guide to sources of information, XI, 375
 Asparagus—
 breeding, XIV, (749)
 canning, XII, 1543
 carotene content, XI, 1491
 excised tip cultivation, XV, (758)
 frozen pack preservation, XV, 1308
 German work on, XII, (489)
 growing—
 in B.C., XII, 163
 in Illinois, XI, 804
 in Michigan, XV, (1852)
 in U.S.S.R., XV, 1769
 growth of male and female, XI, (1278)
 juice concentrate, XV, 1319
 losses in, XI, (1278)
 manuring, XIV, 1739
 market diseases, XII, 907
 miner (*Agromyza simplex*) not a pest, XIV,
 1740
 pest (*Ptochomyza asparagi*), XIV, (1298)
 planting depth, XIII, (231)
 production in Southern U.S.A., XV, (758)
 rust (*Puccinia asparagi*), XIII, 186; XIV, 748
 sex studies in, XI, 113
 soil preferences, XV, 1768
 storage, XIII, 1049
 vitamin C in, XI, 444, 471; XII, 490, 491
 yields, XIII, (1454)
Aspergillus—
 description of genus, XIV, 1434
flavus as source of flavine, XV, 656
niger source of various products, XIV, 1294
Asperisporium caricae, XV, (1914)
Aspidiotus perniciosus, XI, 1179; XII, 1152; XIII,
 556; XIV, 595, 596, 1149, 1615; XV, 1038,
 1599
 Assam—
 Dep. Agric. A.R., 1939/40, XI, 1018
 tea culture in, A.R. 1940 and 1942, XII,
 (1584); XV, 276
 Association of Applied Biologists, post-war prob-
 lems, XIII, 1236
 Association of Official Agricultural Chemists,
 56th Annual Convention, XI, 1511
 Aster—
 artificial lighting affects, XI, (1069)
 cultivation, XV, 1859
 wilt (*Fusarium conglutinans* var. *callistephi*),
 XV, 238
 yellows in periwinkle, XII, 541
Asterolecanium pustulans, XII, 247
Atalantia monophylla as citrus rootstock, XIV, 961;
 XV, 936
 Atchison experiment orchard, Kansas, XIII, 59
 Atlas, chromosome, of cultivated plants, XV, 2065
Atropa—
belladonna—
 cultivation, XIV, 1719; XV, 175, 1741
 hyoscyamine synthesis in, XIV, (1298)
Phytophthora rot, XIV, 1720
 hybrids, vegetative propagation, XV, 1738
 hybrids, yield, XV, 1739
 Atropine transference by grafting, XII, (1195)
Atta cephalotes, *see* Ant, leaf-cutting
Attalea speciosa in Brazil, XV, 856
Auchenorrhyncha of cultivated fruit, XII, 124
Aurantioideae, chromosome numbers in sub-genus
Citrus, XIII, 1463

SUBJECT INDEX

Australia—

- agronomy as branch of agricultural science in, XIV, 977
- Council for Scientific and Industrial Research, A.R. 1939/40-1943/44, XII, 1146, 1147; XIII, 1630; XV, 369, 1348
- plant introductions into, XIII, 2
- recent horticultural research, XIII, 1246
- rural industries in, XIV, 1456
- rural possibilities of a north-western tropical area in, XIV, 1878
- Australian bush, chemistry of, XIV, 1330
- Autographa brassicae*—
 - a cabbage caterpillar, XIII, 514
 - as pest of lettuce, XIV, 1750
- Autumn coloration in pears, XV, 1574
- Auxin, *see also* Growth substances, Hormones, etc.—
 - content of seeds, XIV, 795
 - determination—
 - in plants, XII, 5
 - in soils, XII, 1192
 - extraction from plant tissues, XI, 333; XII, 4; XIII, 10; XV, (431), 966, 1812
 - formation in green plants, XII, (765)
 - mechanism of action, XIII, 9, (676); XV, (431)
 - precursors, XI, (347); XIV, (1476)
 - production in the plant, XIV, (458)
 - relationship between zinc and, XI, 332
 - in seedlings from X-rayed seed, XIII, (367)
 - transport in woody stems, XIII, (367)
 - Went coleoptile assay method, XI, (347)
- Availameter, a soil moisture meter, XI, 691
- Avocado—
 - anthracnose and *Cercospora* spot, XV, (809)
 - in Argentina, XI, (887)
 - and boron, XV, 1225, 1226
 - breeding XIII, (998)
 - cold injury, XI, 883; XII, 584
 - decline and dieback, XI, 881, 884, 885; XIII, 266, 551; XIV, 1872; XV, 1218-1223
 - fertilizers, XI, (887)
 - flower—
 - abnormality, XI, 876
 - bud differentiation, XIII, 570
 - fruit—
 - anatomy, XIII, 995
 - biochemistry, XII, (587)
 - woodiness in, XIII, 994
 - germination facilitated by removal of seed coat, XIII, 993
 - grafting methods, XII, 1015
 - grafts, care of, XI, 879
 - growing—
 - in Algeria, XV, 1194
 - in Argentina, XIV, 1339
 - in California, XIV, 1870
 - in Guatemala, XV, 1913
 - in Queensland, XII, 1014; XIV, 865
 - in S. Africa, XI, (887)
 - in Spain, XV, 1912
 - hardy varieties, characters of, XII, 1493
 - history of, XI, 168
 - industry in Florida, XI, 873
 - irrigation, XII, 582
 - mealybug, long tailed, biological control, XIV, 1873
 - mites, XI, 169, 170; XIII, 996
 - nitrogen requirements, XIII, 992
 - nutritive value, XIV, 1393
 - oil, XIV, 943
 - pests, XI, 169; XII, 586; XIV, 1338
 - planting distances, XI, 878

Avocado (*continued*)—

- pollen germination, XIII, 1498
 - polyembryony in, XIV, 1871
 - preservation, pliofilm wraps for, XIII, 1047
 - propagation, XIV, 423; XV, 1235
 - pruning, XI, 880; XII, (587)
 - research in California, XI, 875
 - root—
 - aeration, XI, 874
 - development, XI, 877
 - distribution on bench terraces, XII, 234
 - scab, XV, (1914)f
 - seedling production, XV, (1232)
 - soil—
 - management, XII, 580, 581; XIII, 997
 - moisture, XII, 582, 583
 - spot (*Cercospora* and *Colletotrichum gloeosporioides*), XI, 886
 - storage, XI, 979; XII, (288); XIII, 1565; XIV, 1949; XV, 1304, 1353
 - sun blotch virus, XI, 542; XII, 585
 - thinning, XII, 579
 - thrips (*Heliothrips haemorrhoidalis*), XV, 1227
 - topworking, XV, 1224
 - variety situation, XII, 578
 - virtue and uses, XIV, 324
 - zinc deficiency, XI, 882
- Avrostia translucens* mite on begonias, XII, (200)
- Azalea—
 - cultivation in Florida, XV, (774)
 - flower spot (*Ovulinia azaleae*), XII, 984
 - fumigation, XIV, 831, 1809
 - leaf and twig blight, XIII, 1458
- Azerbaidžan Botanical Institute, XIV, 1718
- Azadirachta indica*, root habit in different countries, XII, 1023
- Azotobacter—
 - respiration study of, XIII, 700
 - stimulation by incorporation of oranges in soil, XII, 1470
- Babassu (*Orbignya* spp.), *see* *Orbignya*
- Bacillus*—
 - barkeri*, XI, 1163
 - betle*, XV, 1289
- Bacteria—
 - antibacterial substances in higher plants, XIV, 1129; XV, 1028
 - in apple juice, XIII, 1074
 - inhibition by onion juice, XI, (301)
 - metabolism of, XII, (462)
 - nitrogen-producing, *see also* Azotobacter, XI, 367; XII, (659)
 - nodule, of legumes, XII, 31
 - phytohormonal activity of soil, XV, 969
 - plant tumour, XIV, 128
 - soft rot, identification of, XI, 788
 - soil, antibiotic substances produced by, XV, (1071)
- Bacterial—
 - canker, *see* *Pseudomonas mors-prunorum*
 - spot, *see* *Xanthomonas pruni*
 - diseases in Portugal, XIII, 1267
 - invasion through stomata, XV, (598)
 - plant pathogens—
 - classification, XIV, (635)
 - names for, XIII, (1270); XIV, 1595
 - types, XIII, 1266
 - soft rot of tomato, XIII, 1434

SUBJECT INDEX

Bactericides—

- dichlorophenoxyacetic acid, XV, (1658)x
- in flowers, XIV, 1638
- juices of cabbage and other vegetables, XV, 127
- metal soluble salts as, XIII, 102
- penicillin as, XV, 126, 551, 552
- of plant origin, XV, 558

Bacteriophage of root nodule organisms, XV, 1027

Bacterium—

- angulatum*, XIII, (231), XIV, 1219
- campestre*, XI, 114; XIV, 1260
- fascians*—
 - on melons and various plants, XIV, 249
 - in strawberry, XII, 438
- manihotus*, XI, 915
- pruni* causes apricot spotting, XI, 755
- solanacearum*, XIII, 483; XIV, 688; XV, 744, (758)
- subtile* rots potato and rets flax, XIV, 669
- tabaci*, XIII, (231); XIV, 1219
- tumefaciens*, see Crown gall
- chrysostoma*, photoperiodicity of, XIV, 994

Bagging—

- affects corky lenticles in pear, XI, 47
- peaches, XV, 573

Balanties roxburghii, oil from fruit of, XIII, (1620)

Baldness caused by *Leucaena glauca*, XI, 960

Balehonnur Coffee Experiment Station, XI, 926

Balsam—

- from *Abies*, XIV, 1236
- Impatiens balsamina*, photoperiod affects, XI, 358
- Myroxylon balsamum*, XII, 1016
- of Peru (*Myroxylon sonsonatensis*), processing, XI, 1488

Balsgård Fruit Breeding Station, Sweden, XV, 448

Baluchistan, fruit growing in, XIII, 1026

Bamboo culture in southern U.S.A., XV, 823, 1217, 1901

Banana, see also *Musa*—

- Ambon, trial of, in Philippines, XI, (248)
- bunchy top virus, XI, 243
- car fumigation with HCN, XIII, 1564
- carbohydrate metabolism during storage, XIII, 629
- Clitocybe* root rot, XIII, (294)
- covers for, XI, 244
- cytogenetics, XV, 380
- diseases—
 - in Haiti, XI, 957
 - in Uganda, XV, 816
- drying, XI, 1010
- fertilizers, XI, 240, 601, 602; XIV, 1368
- genetics in relation to breeding, XIII, 1032
- growing—
 - on acid soils, XV, 308
 - in Burma, XII, 267
 - in Costa Rica, XII, 589
 - in Honduras, XI, 598, 1434
 - on islands of Caribbean, XI, 599
 - in Queensland, XI, (1436); XV, 1987
- irrigation, overhead, XII, 1089
- land, maintenance of fertility, XI, 1435
- leaf spot (*Cercospora musae* and *Mycosphaerella musicola*), XI, 604, 956, 957, 958, (965), 1434; XII, 268, 1153; XIII, 291, 292, 293, 617, 669; XIV, 2022; XV, 1353
- marketing, XI, 603
- mattocking, XI, 241
- nutrition as qualified by development, XIV, 1368

Banana (continued)—

- nutritive value, XIV, 1393
 - panama disease (*Fusarium oxysporum cubense*), XI, 1434; XII, 1090, 1153, 1301; XIII, 291; XIV, 359, 1928; XV, 378
 - planting methods, XII, 1157
 - research at I.C.T.A., Trinidad, XIII, 291
 - respiration, see storage
 - rust thrips, XI, 605
 - soil problems, XV, 308
 - squitter disease (*Nigrospora sphaerica*), XI, 1437
 - stem borer (*Cosmopolites sordidus*), XII, 1147
 - storage, XI, 264, 617, 981, 1457; XII, 281, 282; XIII, 629; XIV, 370, 1388, 1389
 - suckers, selection, XI, 600
 - tannins in, XV, 860
 - the Topocho, resistance to *Cercospora musae*, XIII, 669
 - trade, West Indies to Canada, XII, 282
 - transporting, endless wire system for, XIV, 358
 - utilization, XIV, (412)
 - vitamin C in, XI, 242; XIV, 370
- Bandakka, see *Hibiscus esculentus*
- Banding, grease or chemical, of tree trunk, XIV, 601
 - Barbados Dep. Sci. Agric. A.R. 1939/40, 1940/41 and 1943/44, XII, (337), 1573; XV, 2072
 - Barbados, minor crop investigations, XI, 224
 - Barbasco insecticidal plant, see also *Lonchocarpus* spp., XIV, 1341, 1342
 - Barberry, legislation in U.S. on control of, XIV, 129
 - Bark splitting, grease banding and, XIII, 441, 442
 - Barley combings as vegetable manure, XIV, 1197
 - Basella rubra*, *Acrothecium* leaf spot of, XV, (1995)a
 - Basic English for science, XIII, 1623
 - Basil, see Camphor basil
 - Bassia longifolia*—the mee tree—as rootstock for sapodilla, XIV, 891
 - Basutoland Dep. Agric. A.R. 1939/40-1943/44, XI, (1526); XII, (1164); XIII, (1100); XV, (1366), (2082)a
 - Batocera rufomaculata*, XI, 430
- Bean—
- anthracnose, XIV, 800, 1792
 - aphides, XII, 164; XIII, 530; XV, 1836
 - ascorbic acid content, XV, (758)
 - assimilation of nitrogen and saline solutions, XIII, (1454)
 - bacterial wilt, XIV, 800
 - beetle, Mexican (*Epilachna varivestis*), XIII, 531; XIV, 1794; XV, 1180, 1835
 - blight (*Sclerotinia minor*), XV, 1155
 - boron necessary to metabolism of, XII, 979
 - breeding for resistance to anthracnose, XIV, 794
 - broad, wilt due to *Fusarium avenaceum* var. *fabae*, XIV, 1795
 - calcium deficiency symptoms, XI, 485
 - canned—
 - analysis, XIII, (1620)
 - dehydrated and frozen, a comparison of, XIV, 1980
 - for canning, XII, 183; XV, (1185)
 - carotene in snap and lima, XI, (131), 1491
 - chlorate ions, reaction to, XII, (520)
 - chocolate spot (*Botrytis cinerea*), XIV, 1789-1791
 - cucumber mosaic on, XI, 807
 - cultivation in Suffolk, winter, XIII, 1447

SUBJECT INDEX

Bean (continued)—

- diseases—
 and their control, U.S.D.A. bulletin, XIV, 1787
 environment affects, XIV, 1283
 in Florida, XI, 1268
Fusarium, XIV, 1795
 in Idaho, XIII, 529; XIV, 270
 in Venezuela, XIII, (623)
 dried, vitamin C content, XIII, 1064
 dwarf—
 in N. Zealand, XII, (982)
 vegetative propagation, XIV, 794
 field—
 effect of borax on, XV, 1178
 footrot, XV, 749, (758)
 seed production, XIV, 1188
 soil management and manuring, XIV, 1786
 varieties in Nebraska, XV, 1828
 French, variety trials in Tasmania, XV, 1829
 flies on runner beans, *Chortophila cilicrura*, XV, 2079
 frost resistance, tests for, XIV, 796
 garden types, XIII, 528
 green lima, carotene in, XI, 1491
 growing—
 in Idaho, Washington and Oregon, XIII, 223
 in Michigan, XV, 1831
 in Turkey, XI, 483
 in Victoria, Aust., field, XIII, (225)
 growth, salinity affects, XIV, 1281; XV, 746
 growth substances and, XI, 5, 342, 343, (347), 1062, (1067); XII, 145, 345; XIII, 673; XIV, 1785; XV, 748
 halo blight (*Pseudomonas medicaginis phaseoli-cola*), XII, 1442; XIV, 1793; XV, (227)
 haricot—
 growing in England, XII, 515
 technical communication on, XI, 330
 hyacinth, *see Dolichos lablab*
 in Idaho, improvement, XIII, 529
 jack (*Canavalia ensiformis*), XIV, 364
 kidney—
 cultivation in Brazil, XV, 1179
 development, factors affecting, XV, 745-747, 1176
 leaf cuttings, rooting in, XI, 1267
 leaves, α -naphthaleneacetic acid affects, XI, 5
 light affects growth and nutrition in, XIII, (225)
 lima—
 chemical factors affecting set, XII, 1443
 composition, XIV, (2003)
 cultivation, XIV, 272
 growth affected by insecticides in soil, XIII, 440
Heliothis armigera damages, XIII, 1443
 nutrition, XIV, 1767
 scab, *Elsinoe phaseoli*, XV, 1993
 seed treatment, XV, 750
 utilization as food, XV, (2059)c
 manuring, XI, 485; XII, 1093; XIV, 1282, 1786
 market diseases, XII, 907
 marsh spot, XV, 220
 mosaic-resistant, XI, 123; XIII, 221, 529; XIV, 269
 mosaics, XII, (659); XIV, 797, 798, (799) 800, 869, 1792; XV, (227), (431), 1832
 navy—
 growing in Australia, XII, 516; XIV, 271; XV, 1830
 plot technique, XIII, 220

Bean (continued)—

- pea, environmental factors affect, XV, 1177
 pests in Queensland, XV, 1834
 photoperiodicity in, XIV, 1784
 phyllody, XI, (821)
 picric acid in superphosphate affects, XV, 206
 platinum chloride affects, XIII, 208
 pod borers—
Epinotia opposita and *Maruca testulalis*, XIV, (1803)
 of Puerto Rico, XI, (248)
 powdery mildew resistance, XI, 1269
 Refugee, mosaic-resistant, XIII, 221; XIV, 269
 runner, cross pollination in, XII, 1428
 rust (*Uromyces* spp.), XIII, 1448; XIV, 801; XV, (597), 1833, (1852)t
 salt concentrations and soil moisture content in, XIV, 282
 salting, XV, 1333
 Scottsbluff Pinto, XV, 1837
 seed—
 auxin content, XIV, 795
 heteroauxin stimulation of, XIII, 673
 dusts for protecting against bean weevil, XIII, 224
 selection, super cooling tests in, XIV, 796
 snap—
 ascorbic acid in, XIV, 1965; XV, (1185)
 dehydration, XV, 905
 drought tolerance, XI, (1270)
 foliar diagnosis in, XIII, 222
 growth and quality in, XIII, (1454)
 growth substances affect, XIV, 1785
 storage, XIII, 1048
 varieties for dehydration, XIV, 1666
 vitamin C in, XI, 284; XIII, 1048; XIV, 1965; XV, (1185)
 Soya, *see* Soya bean
 stigmasterol and β -sitosterol isolated from, XIV, (1298)
 susceptibility to tobacco necrosis decreased by CO₂ treatment, XV, 219
 sword or scimitar (*Canavalia gladiata*), XIV, 364
 velvet, strains of, XI, 122
 viruses of, XI, 123; XII, (659); XIV, 797, 798, (799) 800, 1788, 1792; XV, 219, (227), 1832
 vitamin B, in, XI, 121, 1498
 vitamin C, *see* snap
 web blight (*Corticium microsclerotia*), XV, (758)
 weevil (*Bruchus acanthoscelides*), XIII, 224
 wilt, XIV, 1792
 witches' broom, XV, 221
 X-ray studies of field, XI, 484
Xanthomonas phaseoli and *Marmor phaseoli* associated in, XIV, 1788
 Bearing, age at which fruit tree comes into, XV, (1493)b
 Bechtel's crab on Malling rootstocks, XI, 1289
 Bee(s)—
 apparatus for recording entry to and exit from hive, XIII, 386
 diseases, XIII, 1175
 experiments, design and interpretation, XIII 1175
 hive covers, colour of, XI, 46
 hives, heating by electricity, XI, 392; XII, 390
 in Minnesota, XII, (57)

SUBJECT INDEX

- Bee(s) (*continued*)—
orange nectar and pollen and, XIII, 547
package, XII, (1236)
as peach pollinators, XIII, 742
plant, *Asclepias* spp., XII, 530; XV, 56
for pollination, usefulness of, XIII, 51; XV,
(74), 997
preparation for winter, XII, (1236)
repellants, XIII, 1175; XV, 998
spray danger, XI, (1197); XII, 391, 802, 1335;
XIII, 1175, 1176; XIV, 624; XV, 57, 475
Beer, vitamin content, XIV, 966; XV, (2059)k
Beet—
artificial light effect on, XI, 1215
boron—
deficiency and breakdown, XII, 159, 331;
XIII, 505, 506, 1390; XIV, 451
relation to calcium in growth of, XII,
(471)
canning problems, XIV, 1428
curly top virus, XIV, 232
cycle, duration of, XII, (1454)
eelworm (*Heterodera schachtii*), XV, (758)
fertilizers, XII, 160; XV, 1677
garden, *see* Beetroot
harvesting in England, XI, 1209
internal breakdown of table, XIII, 1390
leaf hopper (*Eutettix tenellus*), XI, (488);
XII, (982); XIV, (290)
mosaic, XIV, (1803)
nitrogenous nutrition, XIV, 1726
origin of, XIV, 1186
planting methods, XIII, (1391)
seed production, XIII, 1394; XV, 679
single *versus* double digging for, XIV, 644
sodium cations in, XII, (982)
storage—
sphagnum moss for, XIV, 2019
temperatures, XIV, 1727
syrup from table, XIII, 1079
temperature affects, XIV, (1803)
varieties, American red garden, XIII, 132
Beetle—
Colorado, *see* Colorado
flea, of brassicas, control, XIII, 462, (463),
1392; XV, 1767
Japanese (*Popillia japonica*), XI, 767; XIII,
1351, 1352; XIV, 663, 1683, 1684; XV,
1609, 1610
longicorn—
of coffee, XV, (1298)
in Spanish Territory of Gulf of Guinea,
XV, 933
wood boring, XV, (599)
Beetroot—
manganese deficiency, XII, 912
time of sowing in Sweden, XV, 1753
vitamins in cooked, XV, 886
water relations of cells in, XV, (758)
weed control, XIV, 744
Begonia—
leaf cuttings, XIV, (834)
mite, *Avoxia translucens*, XII, (200)
rex, shoots emitted from punched leaves,
XIV, 1307
Bemisia—
gossypiperda, vector of tobacco leaf curl,
XII, 613
tabaci, vector of tobacco leaf curl, XII,
(1095)
Benin, Nigeria, oil palm investigations, *see also*
A.R. Oil Palm Res. Stat. Nigeria, XI, 229
Benzoic acid in citrus juice determination, XV, 1321
Ber, *see* Jujube
Berebera tree (*Milletia ferruginea*), rotenone in
seeds of, XIII, (578)
Bergenia spp. as source of tannin, XI, 491
Bermuda Dep. Agric. A.R. 1940-1944, XI, (1054);
XII, 1148; XIV, 418; XV, 370, (1366)
Bermuda fruit culture, XV, 302
Bertholletia excelsa, *see* Brazil nut
Beta, *see* Beet
Betel nut (*Areca catechu*)—
cultivation and processing, XI, 1398
source of tannin, XII, 692
Bibliography—
on agricultural literature throughout the
world, XII, 1172
of boron literature 1939 and 1940, XV, 367
on *cinchona*, XV, (1995)f
fruit fly, XIV, 1153
on minor elements, XIV, 950; XV, 924
on oil production, XV, 2049
on wine, American, XIII, 661
Bidens chinensis, XIV, 1891
Biennial bearing—
in apples, XI, 402; XII, 74, 1264; XIII, 1191;
XIV, 83, 86-89; XV, 977
in olive, XI, 1341
in orange, XI, 854; XII, 206
in pome fruits, XI, 401
Biennial habit, thinning and, XI, 731, 854; XII, 71
Biennial Report—
Oklahoma agric. Exp. Stat. 1942/1944, XV,
(946)
W. Virginia agric. Exp. Stat. 1938/40 and
1940/42, XIII, 346, 1637
Rio Piedras agric. Exp. Stat. 1938/39, XII,
330
Bihar agric. Dep. A.R. 1938/39 and 1937/38, XI,
1019, (1526)
Bilberry, *see* Blueberry
Biochemistry—
Annual Review, Vol. 12, 1943, XIII, 1629
of apples, plums and grapes, XI, (737)
dictionary of, XIV, 2009
of vegetables, XIV, 638
Biological—
control—
of cacti, XI, 184, 774; XIII, 267
catalogue of parasites and predators,
XIV, (1185)
of codling moth, XIV, 954, 1158; XV,
574
compared with chemical, XV, 1370
of fruit flies, XI, 871
of greenhouse white fly, XI, 452
of insects—
by bacteria and fungi, XIV, 1639; XV,
585
pests, XIII, 660; XIV, 629, 630, (635)
miscellaneous, XV, 369
role of predators in insect, XIV, (161)
as supplement to chemical control, XIV,
630
of walnut datana, XI, 1195
of weeds, XII, 1146; XIV, 610; XV, 369,
372
discoveries, XII, 1171
dynamic method of plant nutrition, XI, 684;
XIV, 998, 1026
problems, post-war, XIII, 1236
research in U.S.S.R., *see*, XIV, 973, 974
Biologists' post-war problems, XIII, 1236

SUBJECT INDEX

- Biology—
 applied—
 in Tasmania, XV, 1537
 in wartime, function of, XI, 651
- Bios—
 distribution in leaves of vine and *Pueraria*, XIV, (1030)
 substances in plants, XIII, 15; XIV, 998, 1026
- Birch sap as source of cellobiose, XII, 1137
- Bird—
 cherry aphid (*Rhopalosiphum padi*), XIV, 1151
 scarers, electric fence, XIV, 1166
- Birds, useful, protection of, XIV, 1165
- Bitter gourd (*Momordica charantia*) resistance to *Dacus cucurbitae*, XII, 271
- Bitter pit in apple, *see also* Apple—and Kelsey spot in plum, similarities, XII, 58
- Blackberry—
 chromosomes in, XI, (1137)
 citric acid in, XIV, 928
 cultivation—
 in England, XI, 1132
 in Missouri, XIV, 1085
 in Ontario, XV, 1008
 description and selection, XI, 58
 fruit development, growth substances and, XV, 510
 mosaic on, XIII, 154
 Pacific Coast (*Rubus ursinus* and *R. lemurum*), variability in, XIV, (534)
 pests, XII, (867)
 stamen blight (*Hapalosphaeria deformans*), XIII, 821
 varieties, Merton Thornless, XIII, 665; XIV, 960
 as weed, XIV, 1636; XV, 580
 a white, XV, 1500
- Black currant—
 eelworm (*Aphelenchoides ribis*), XI, 1175
 growing—
 in Éire, XII, 86
 in England, XII, 1272; XIII, 406; XV, 1009
 in Ontario, XIV, 1084
 juice production, XI, 992
 leaf spot (*Pseudopeziza ribis*), XV, 1577
 midge (*Dasyneura tensis*), XI, 1175, 1188; XIV, 548
 pests, XII, (867); XIII, 431
 for syrup, XV, 980
 syrup, XIII, 1078
 varieties, English, XV, 1009
 variety trials in Finland, XIII, 405
 vitamin C in, XI, 992; XV, 2018
 vitamin P in, XIII, 322; XIV, 1968, 1969; XV, 332
- Blasting to improve soil conditions, XIV, 1081
- Blood and bone as vegetable manure, XIV, 1197
- Blister rust, white pine, legislation re, XIV, 129
- Blossom blight, pollenicides supplement bactericides in control of, XII, (1318)
- Blossom, frost damage to fruit, XII, 423, 1286
- Blossoming, soil temperature influences date of fruit, XIV, 59
- Blower for powdered insecticides, XIV, 1347
- Blueberry (*Vaccinium* spp.)—
 boron deficiency, XV, 1358
 breeding and selection, XIV, 1547
 in British Columbia, XI, 1020
 budding technique, XIV, 1547
 cane canker (*Phylospora corticis*), XIII, 428
 classification, XI, (1137)
 composition and uses, XV, 513
- Blueberry (*continued*)—
 cultivation—
 in Canada, XI, 1020; XIV, 532
 media, XIII, 72, 76
 in U.S.A., XI, (1137); XII, 830, 831, 1155, 1156; XIII, 74, 75, 671, (1211); XIV, 96; XV, 934, 945, 1010
 cuttings, XII, 408; XIII, 73, 1210; XV, 77, 1501, 1502
 dehydration, XIII, (1067)
 diseases, XIII, 1281
 frozen pack, XI, (291)
 fruit fly (*Rhagoletis pomonella*), XIV, 140; XV, 973
 fruit size, XII, (411)
 growth substances and, XIII, 72, 1210; XV, 77, 1502
 identification by leaf, XIII, 77
 inherited characters, XIII, 78
 juice production, XII, 1156
 lime and, XI, (1137)
 low-bush, selection, XI, (1137)
 manuring, XI, (1137); XIV, 1548-1550; XV, 1007
Mineola vaccinii or fruit worm on, XI, 1194; XV, 1631
 nutrient media, XIII, 72
 pH of leaves, XV, 515
 photoperiod influences, XIII, 76
 pollination, XIV, 95; XV, 517
 pruning, XI, (1137); XIV, 1551; XV, 1007
 rabbit eye, *Vaccinium ashei*, XV, (526)
 research in Washington, *see* Washington agric. Exp. Stat. A.Rs.
 rest period requirements, XIII, 1209
 seed size, XI, (1137)
 selection in West Virginia, XIII, 1637
 soil types and management, XIII, 76, 778; XV, 516, 1007
 storage, XIII, 306
 thrips (*Frankliniella vaccinii*), XII, 1320
 varieties for dehydration, XV, 514
 virus, stunt, XV, 1565
- Boarmia roboraria* on apple foliage, XIV, 1610
- Boehmeria nivea*, XI, 901, 1233; XIII, 1508; XIV, 681, 1694
- Bog plants in Manchuria, XI, (1092)
- Boga medeola* as shade for tea, XIII, 343
- "Boladeras" treatment for plant invigoration, XV, 1642
- Boletaceae* in Western U.S.A., XIV, (1803)
- Boletus*—
 spp. in Palestine, XII, (1450)
tropicus, XI, 157
versipellis, systematics of, XV, 755
- Bolivia, plant resources, XII, 588, (595)
- Boma plateau, one home of *Coffea arabica*, XIII, 276
- Bomb craters, the filling of, XII, 778
- Books, list of Farmers' Club Library, London, XV, 1341
- Borax, *see also* Boron—
 and apple—
 cork, XI, 1151
 fruit colour, XI, 52
 maturity, XII, 1253
 storage quality, XI, 254
 toleration limits XIV, 1573
 for turnip water core, XIV, 1247
- Border trees, relative yields, XIII, 1201
- Boric acid checks gumming, XI, 1470

SUBJECT INDEX

Boron—

- absorption—
 - by soya bean, **XIII**, (227)
 - studies, **XIV**, 450
 - by sunflower seedlings, **XV**, (227)
- accumulation in plants, **XV**, 414
- apple storage affected by, **XI**, 69, 254; **XIII**, 1558
- availability in soil, **XI**, 25; **XII**, 747
- and avocado, **XV**, 1225, 1226
- calcium relationships, **XII**, (471); **XIV**, 447, 448
- in citrus soils, **XIV**, 1831
- in date gardens and date palms, **XIV**, 1868
- deficiency—
 - in apples, *see* Apple
 - in apricots, **XI**, 1518; **XII**, 104
 - in beet, *see* Beet
 - in blueberry, **XV**, 1358
 - in brassicas, **XII**, 1423
 - in brussels sprouts, **XV**, 695
 - in cabbage, *see* Cabbage
 - in cauliflower, **XII**, 1424; **XIV**, 756
 - in celeriac, **XIV**, 248, 1264
 - in celery, **XII**, 967; **XIII**, (231)
 - in flowering bulbs, **XV**, 1358
 - in kohlrabi, **XII**, 1424; **XIV**, 756
 - in mangolds, **XIII**, 667
 - in pears, **XIII**, 420
 - in poppies, *see* Poppy
- possible confusion with frost injury, **XV**, 1550, 1552
- in radish, *see* Radish
- in raspberry soils, **XII**, 407
- relation of plum gumming to, **XI**, 1470; **XIII**, 1257; **XV**, 1020
- in rutabagas, **XIII**, 667
- in squash, **XII**, 1426
- in strawberry, **XV**, 1358
- in sugar beet, **XIII**, 505, 887
- in tomato and ascorbic acid content, **XIV**, 1272
- in turnip and swede, **XII**, 161
- in vegetables, **XIV**, 1675; **XV**, 1358
- in vines, *see* Vine
- determination—
 - in fertilizers, **XII**, 25
 - of minute amounts, **XIII**, 1137
 - in plant material, **XI**, (1092); **XIV**, 449
 - in soil, **XII**, (39); **XIV**, 449
- effect on enzyme activity in tomato, **XIV**, 1276
- excess, affects apple storage quality, **XIII**, 1038
- and field beans, **XV**, 1178
- and flax diseases, **XIV**, (547)
- in forage crops, **XIII**, 855
- and guayule, **XV**, 671
- in Hawaiian soils, **XIII**, 1632
- and indoleacetic acid reaction in lettuce, **XIV**, 764
- in irrigation water, **XI**, 728
- and lemon growth, **XIV**, 841
- literature (1939 and 1940) bibliography, **XV**, 367
- and magnesium and potash interaction on melon, **XII**, 470
- and nitrogen content of bean, **XII**, 979
- and nitrogen distribution in nasturtium, **XIV**, 829
- as nutrient, summary of position, **XIV**, 1072, 1073
- pea affected by, **XIV**, 811

Boron (*continued*)—

- and pecan nutrition, **XI**, 743
- and plant disease, **XI**, 68
- and plant growth, affected by liming, **XII**, 1362
- in plants, **XV**, 1378
- potassium relationships—
 - in grapes, **XV**, 88
 - in tomato, **XIV**, 447
- in potato plant, **XI**, 1223
- research, **XII**, 24, 25
- in seeds, **XV**, 1379
- soil requirements in New Jersey, **XV**, 413
- and spinach nutrition, **XV**, 697
- strawberry response to, **XIV**, 99
- and sunflower, **XIII**, 497
- in Swiss soils and rocks, **XIV**, 1074
- and tomato—
 - enzyme activity, **XIV**, 1276
 - nutrition, **XIV**, 1770; **XV**, 723
 - pollen germination, **XII**, 1434
 - toxicity symptoms, **XI**, 728; **XV**, 414
 - turmeric determination of water-soluble, **XIV**, 1831
- and vegetable—
 - crops, **XII**, (471); **XIII**, 855
 - seed production, **XV**, 608
- and walnuts, **XV**, 941
- and weed nutrition, **XIV**, 1075
- for weed seed control, **XV**, 112
- Botanic Gardens—
 - at Buitenzorg, **XI**, 545
 - at Dnepropetrovsk, **XV**, 28
 - at Kew, **XIV**, 427
 - at Peradeniya, **XIII**, (576)
- Botanical—
 - Faculty of the Kazah State University, **XV**, 29
 - Institute of Azerbaidžan, **XIV**, 1718
 - science, unification, **XIV**, 429
 - Society of America, abstracts of Proceedings, **XV**, 431
 - specimens, collection and despatch, **XIV**, (458)
- Botanists, well-known, Rafinesque, **XV**, 27
- Botany—
 - manual on agricultural, **XII**, 1566
 - taxonomic, dynamic approach to, **XIII**, 1127
- Botryosphaeria ribis* on apple, **XII**, 1313; **XV**, 95
- Botrytis cinerea*—
 - on apple and other hosts, **XI**, 76, 1162, 1171; **XII**, 439, 858, 1302; **XIII**, 1275
 - on bean, **XIV**, 1789-1791
 - controlled by creolin, **XIV**, 1178
 - on flax, **XIV**, 199
 - on fruit and hops, **XII**, 1312
 - on grapes, *see* Vine, grape rot
 - on lettuce, **XII**, 964
 - weed hosts of, **XII**, 1312
- Botrytis diseases—
 - of gladiolus corms, **XIV**, 1308; **XV**, 772, 1190
 - in irises, **XI**, 1295; **XV**, 771
 - in lettuce, control by pentachloro-nitro-benzene dust, **XI**, 111
 - in onions, **XV**, 687, 688, 691
 - in potato tubers, **XI**, (1229)
- Bougainvillea* spp. propagation from cuttings, **XV**, 968
- Boyce Thompson Institute, souvenir booklet, **XI**, 373

SUBJECT INDEX

- Boysenberry—
manuring, XV, 509
new strain of *Agrobacterium rubi* from, XIV, (1184)
- Bracken—
chlorosis due to manganese deficiency, XIII, 16
ecology, XI, (441); XIV, (1662)
growth rate, XIV, 146
for potash, nitrogen and animal feed, XII, (1333)
problem, rational approach, XV, 579
removal and control, XI, 87, 773; XIII, 436; XV, 113
as source of compost, XI, 655
- Bradbourne walled garden, XV, 1418
- Bramble—
and bush fruit insects, XIV, (1184)
cane gall (*Phytomonas rubi*), XI, 757
- Brandy, chemical studies on, XIV, (412)
- Brassica—
alba and *B. nigra*, see also Mustard, XIII, 493
oleracea, heteroauxin and production of
tetraploid shoots in, XIII, (33)
- Brassicaceae—
boron deficiency in genus, XII, 1423
carbohydrate metabolism in some oil produc-
ing, XIV, 1716
Contarinia torquens control, XV, 944
flea beetles of, XV, 1767
nutrition, XIV, (755)
crops, origin and relationship of, XIII, 906
seed production, XII, 1351; XIII, 135
- Brassolis sophorae* and a parasite, XV, (865)
- Brazil—
fruit production, XII, 781
nuts—
in Bolivia, XII, 588
in Brazil, XV, 855
phytopathology in, XII, 110
- Brazilian dicotyledons, key to, XV, 1916
- Breadfruit (*Artocarpus incisa*), propagation, XI, 1038; XV, 1976
- Breeding—
apple, see Apple
asparagus, XIV, (749)
avocado, XIII, (998)
bean, XIV, 794
cabbage, XIV, 752; XV, (758)
cacao, XI, 565; XV, 1270
carrot, XIII, 1096; XIV, (729)
cauliflower, XIV, 245
cherry, XIV, 485, 491
by chromosome doubling, XIV, 509
deciduous fruit, XI, 697, 1032; XIII, 1143
devices for covering emasculated flowers in,
XI, 13
environment effect on hereditary factors in
relation to, XIII, (1138)
for frost resistance, XI, 420; XIV, 483, 484,
485, 491, 655, (1184)
fruit—
German work, XIV, 483, 484, 485, 491
habitat important in, XI, 382
at Vineland, Ont., XV, 1417, 1420, 1421
gooseberry, XII, 87
for hardiness in U.S.S.R., XII, 96; XIII, 1146-1151
hemp, XIV, 678, (680)
Hevea brasiliensis, XI, (248)
methods of plant, XI, 10
musk melon, XIII, 196
onion, XIV, 741, 1251
- Breeding (continued)—
peach, see Peach
pear, see Pear
potato, XIII, 1096; XIV, (193)
raspberry, see Raspberry
for resistance to pests and diseases, XIII, 795;
XV, (599)
a single plant thresher for use in, XIV, (641)
small fruit—
in Germany, XIV, 484
in Siberia, XIII, 1207
soya bean, XIV, (805)
strawberry, see Strawberry
sunflower, see Sunflower
tomato, see Tomato
vegetable, XI, 1525; XV, 2079
vine, see Vine
- Bremia lactucae*, XII, 964; XIV, 1749
- Brevicoryne brassicae*, XIII, 189, 1350, 1407
- Brewing, see also Fermentation Industries—
in Great Britain, wartime problems, XIV, 940, 966
story of British, XII, 675
trials with new hops, XII, 941
- Bridge grafting—
citrus, XV, 1875
deciduous trees, XI, 1157; XIII, 729
- Brine for vegetable preservation, see Salting
- Bristol Agricultural Advisory Centre war work,
XIV, 969
- British agriculture, a survey, XI, 7
- British Columbia—
Dep. Agric. A.R. 1939, XI, 1020
fertilizer recommendations, XI, 49
- British Empire products, research on, XI, 9
- British Guiana Dep. Agric. A.R. 1942-1943,
XIII, (1638); XV, (946)
- British Guiana Dir. Agric. Administ. Rep. 1939-
1941, XI, (1054), (1526); XIII, (347)
- British Honduras—
Dep. Agric. A.R. 1940-1944, XII, (337);
XIII, (1100); XIV, (968); XV, (946), 2073
exports in 1944, XV, 2073
soils of, XII, (273)
vegetation, XIII, (1553)
- British West Indies Central Sugar Cane Breeding
Station. Barbados, A.R. 1939/40 and 1940/
41, XIII, (672)
- Broccoli—
mosaic, XIII, 189
origin of, XI, (1244)
variety trials in Scotland, XIII, 515
- Broom as a fibre plant, XIV, (1803)
- Broomrape (*Orobancha ludoviciana*)—
parasitic on tomato, XIII, 938
physiological aspects of sunflower resistance
to, XIII, 496; XIV, 1228, 1229
- Brotolomia meticulosa* control, XI, 509
- Broussonetia papyrifera* a fibre source, XIII, 160
- Brown rot diseases, see also *Monilia*, *Sclerotinia*
and under host—
and codling moth control combined, XV, 1619
sulphur for control of, XI, 1173
- Browning system—
in dried apples, inactivation of, XIII, 1597
in frozen fruit, inactivation of, XII, 1529
- Bruchus pisorum* or *B. obiectus*, XII, 1147; XIV, 814, 815, 1953
- Brussels sprouts—
boron deficiency, XV, 695
growing in England, XII, 960

SUBJECT INDEX

- Brussels sprouts (*continued*)—
 nutritive value, XII, 961
 transplanting, use of starters at, XII, 496
 variety trials—
 in England, XV, 198
 in Holland, XIV, 1261
Bryobia praetiosa, XII, (138)
 Buckwheat cultivation, XV, (1852)g
 Bud(s)—
 axillary, determination of, XIII, 7
 flower differentiation and abortion, XII, 11
 mutations—
 apple, *see* Apple
 hidden, XII, 10
 in peach, *see* Peach
 in tulip, XI, 1297
 Budding—
 after-care, XIII, 381
 chart, Canadian, XV, 988
 citrus, *see* Citrus
 deciduous fruit trees, XV, 53, 988, 1433
 fruit trees, including citrus and tropicals,
 XII, 46; XV, 989
 kaki, XIII, 48
 mango, XI, 226, 851
 manual, XII, 792; XV, 1344
 tung oil, XI, 898
 use of main stem guide after, XII, 1220
 vines, height of bud, importance of, XII, 836
 Buenos Aires University, work of the Faculty of
 Agriculture, XV, 949
 Buffaloberry—
 (*Shepherdia argentea*) a dryland fruit, XIII,
 777
 (*Lepargyrea argentea*) source of vitamin C,
 XIII, 408
Bufo marinus as insect predator, XI, 182, 552
 Bug, green vegetable, *Nezara viridula*, XV, 1348
 Building-frames, timbers and sizes, XII, (736)
 Buitenzorg botanical gardens, XI, 545
 Bulbs—
 boron deficiency in flowering, XV, 1358
 disinfection of narcissus, XII, 987
 eelworm (*Ditylenchus dipsaci*), XIII, 242
 hot water treatment, XI, 829, 830; XIII, 539;
 XV, 243, 244
 manuring, XI, 135, 826
 storage temperatures, XI, 827, 831, 1299,
 (1300); XII, 1459
 surface cultivations help, XI, 828
 Bulletin of dry sub-tropical crops (Russian), XIII,
 1485
 Bulletins of U.S. experiment stations issued
 1939-1942, XII, 733; XIV, 2015
Bumaea alcinoe pest of cananga, XV, 841
 Bureau of Chemistry, California, A.R. 1940, XII,
 321
 Burliar Fruit Station, XI, 1033; XIV, 961; XV, 936
 Burma Dep. Agric.—
 Rep. agric. Statistics 1939/40, XI, (1054)
 Rep. Operations 1939/40, XI, (1054)
 Burnihat Citrus Experimental Station, XI, 1018
 Burrknots in apple trees, XI, 714; XIII, 1170;
 XV, 460
Bursaria spinosa, recovery of esculin from, XIII,
 161#
 Burweed (*Xanthium strumarium*) an oil plant,
 XII, 1404
 Bush fruits, *see* Small fruits
Butea capitata, ground cover in Uruguay, XII, 594
 Buttercup as medicinal plant, XIV, 712
 Butters, fruit, refractometer charts for, XIII, 1083
Buxus sempervirens, the common box tree, an
 oil-plant, XV, 268
Byssosochlamys fulva, XI, 1478
Bytiscus betulae, XIV, (635)
Byturus sp. and other beetles of raspberry, XII,
 871; XV, 572, 1607
 Cabbage—
 aphides affect composition, XII, 164
 ascorbic acid content, XV, 694, (758)
 ballhead, in Pennsylvania, XIV, 1256
 black rot disease (*Bacterium campestre*),
 XI, 114; XIV, 1260
 boron deficiency in, XI, 1243; XII, 1422;
 XIII, 187, 506; XIV, 451; XV, 695, 1358
 breeding, XIV, 752; XV, (758)
 caterpillar, *see also* *Pieris rapae*, XI, 789,
 XII, (468), 492, 493, (982); XIII, 514;
 XV, 1152, 1348
 clubroot, *see also* Clubroot, XIV, 1257, 1259
 damping off control, XV, 1773
 dehydrated—
 compressed blocks, XV, 2036
 vitamins in, XIV, 1405; XV, 329
 dehydration, XIV, 934, 935, 1978; XV, 2037
 for dehydration, XIV, 751
 disease due to *Cercospora albomaculans*,
 XV, (597)
 diseases, XI, 1245, (1278)
 downy mildew (*Peronospora parasitica*), XV,
 (758), (1852)
 early, methods of raising, XIV, 750
 fasciation in, XIII, 1407
 fertilizers, phosphatic, XIII, 459
 fly (*Hylemyia brassicae*) and control, XIII,
 861, 920, 1405; XIV, 1743, 1744; XV, 1153
 growing—
 in England, XI, 107
 in Java, XI, 962
 and marketing in New York, XIII, 1406
 in Philippines, XI, 1443
 in Sweden, XV, 1770
 irrigation, XV, 1772
 maggot, *see* fly
 manuring, XII, 928, 959; XIII, 919; XIV,
 1745
 mildew control, XV, (598)
 mosaic, XIII, 188; XV, (1853)k
 nutrition of spring, XI, 1242; XIII, 919
 pest control, XV, 1775
 propagation from leaf cuttings, XIV, 1742;
 XV, 693
 red—
 anthocyanin in, XIV, 1741
 planting, XI, 1209
 ring necrosis, XI, (1244)
 seedling colour as distinguishing mark,
 XIV, 1248
 spray residues on, XIV, 754
 starter solution experiments, XIII, 1421
 stem weevil (*Ceutorhynchus*), XIV, 753
 storage, XII, 669, 1531, 1532; XIV, 914
 sugar content, XIV, 636
 tetraploidy in, XIV, (755)
 transplanting liquids, fungicidal, XIV, 1259
 varieties—
 American, XIII, 132
 fixation, XV, 693
 in Sweden, XV, 1770
 in Tasmania, XV, 1771
 vernalization, XII, 908
 viruses, XI, (1244); XIII, 188; XV, (1853)k

SUBJECT INDEX

Cabbage (*continued*)—

- vitamin content—
 - in dehydrated, XIV, 1405; XV, 329, 888
 - in stored, XII, 1532
- vitamin C content, XI, 108, XII, 669; XIV, 924; XV, 329, 888
- whiptail due to high acidity, XIV, 246
- white butterfly, *see* caterpillar and *Pieris rapae*
- in winter, spring, XII, 1357
- worm, *see* caterpillar and *Pieris rapae*
- yellow, XIV, 1258; XV, (598), 1774
- yield increased by cross pollination, XIV, 244

Cabinet, *see* ChamberCacao (*Theobroma* spp.)—

- bean pests, lepidopterous, *see* Cacao moth beetle (*Steirastoma depressum*), XIV, 1902
- biennial bearing, XV, 288
- breeding, XI, 565; XV, 1270
- bud opening, XIV, 1897, 1905
- budding in Jamaica, XV, 1353
- buddings *versus* cuttings, XV, 1256
- by-products, XII, 1559; XV, 1285
- capsid, *see also* Cacao *Sahlbergella*
- capsid research in West Africa, XV, 1263
- cherelle wilt, XI, 1387, XIV, 1904
- clonal material I.C.S., XIV, 1903
- cultivation—
 - in Bahia, XII, 1040
 - in British Cameroons, XII, 628
 - in the Gold Coast, XV, 376-378
 - in Guatemala, XI, 564
 - in Java, XI, 563
 - in Nigeria, XIII, 598
 - in Venezuela, XIV, 1896
- cuttings—
 - shading affects, XIII, 282
 - used at Tafo, XIV, 2021
 - versus* buddings, XV, 1256
- dieback, XII, 1041
- diseases in Trinidad, XV, 1274
- dormancy, XIV, 1897, 1905
- fermentation—
 - microbiological studies, XII, (708); XIV, (2003)
 - problems, XV, 292
 - products, XI, 1388
- field experiments of botanical section at Trinidad, XI, 1386
- genetical research, suggestions for, XV, 1279
- grading and classification, XV, 1267
- growth substance treatment, XIV, 1466
- Helopeltis* pests, XI, 933
- improvement in Cameroons, XIII, 286
- improvement policy in Trinidad, XIII, 597
- industry of Brazil, XII, (1095)
- leaf development, XIV, (1370)
- long term objectives, XV, 1259
- manurial trials, preliminaries to, XIII, 278
- manuring, XIV, 2021; XV, 1270
- moth (*Ephestia cautella* or *E. elutella*), XI, 932, 1392; XV, 1284
- mulching trials, XI, 1390
- mutation (*T. leiocharpa* Bern. var. *Comum*), XI, 930
- nomenclature and classification, XV, 287
- origin and distribution, XI, 1351
- pests, XI, (566); XIV, 886; XV, 1275
- physiological studies, XI, 1387; XIV, 1904; XV, 1280
- plantation, in British Cameroons, XII, 628

Cacao (*continued*)—

- pollination, XI, 1389; XII, 630; XIII, 281; XIV, 1896, 1898
- psyllid (*Mesohomotoma tessmani*), XI, 931, 1514; XIV, 2021
- rehabilitation in Trinidad, XII, 629; XIII, 280; XV, 1283
- research—
 - aspects of quality in, XV, 1278
 - in British Colonies, history of, XV, 1260
 - in B. West Indies, *see* in Trinidad
 - in Colombia, plans for, XV, 1273
 - Conference, London, 1945, XV, 1259-1285
 - in East Java, XI, 1383
 - and the peasant in West Africa, XV, 1268
 - station at Tafo, Gold Coast, XI, 209, 1514; XIV, 2021; XV, 1262
 - in Trinidad, XI, 929, 1386-1388; XIII, 668; XV, 1255, 1261
- root disease (*Rosellinia pepo*), XII, 246
- root system, XIV, 341; XV, 289
- rootstock problems, XI, 1385
- Sahlbergella* or brown capsid on, XI, 931; XIV, 1900, 2021; XV, 377, 378, 1265
- scale insects, XII, 247
- selection—
 - in the Cameroons, XI, 208
 - in Gold Coast, XI, 1514; XIII, 1522; XIV, 2021
 - in Nigeria, XV, 1269
 - for productivity and for manufacturers' needs, XV, 1272
 - in Trinidad, XIV, 1901, 1903
- shade for, XI, 963; XIII, 282; XIV, 1896, 2021; XV, 848, 1257
- soil(s)—
 - aeration, XIII, (287), (601), (1016)
 - fertility sometimes a minor factor, XIV, 330
 - improvement, XV, 1270
 - relations of root system of, XV, 289
 - in Trinidad, XV, 1276
- species—
 - Brazilian, XI, 207
 - in South America, XV, 1271
- storage, XV, 1266
- swollen shoot virus, XI, 931, 1027, 1514; XII, 1041; XIII, 1525; XIV, 883, 1349, 1438, 2021; XV, 376, 378, 932, 1258, 1264
- tannin, XI, 565; XIV, 398; XV, (361), 1255
- thrips (*Selenothrips rubrocinctus*)—
 - light affects incidence, XIII, 285, 668
 - natural enemies of, XIV, (903)
 - resistance, XIII, 1528
- twinning seedling, XIII, 283
- uniformity trials, XIII, 278
- vegetative propagation, *see also* cuttings, XIII, 1523; XIV, 1901, 1903, 2021; XV, 1281
- virus diseases other than swollen shoot, XIV, 1899; XV, 1274
- water supply, XIII, (1016)
- wilt investigations in Trinidad, XIII, 599; XIV, 1348
- witches' broom (*Marasmius perniciosus*), XI, 1391; XII, 1301; XIII, 284, 600, 668, 1526, 1527; XIV, 342, 343, 884, 885; XV, 290, 291
- world situation 1945, XV, 1282
- yield—
 - effect of age of field on, XIII, 1015
 - factors affecting in Grenada, XIII, 279
- Cacoecia argyrosplila* control, XII, (462), 1345

SUBJECT INDEX

- Cactus—
 biological control, XIII, (267)
 canning, XI, 306
 spineless, as fodder, XI, 606; XV, 1899
- Caesalpinia coriaria* a source of tannin, XIII, 1531
- Caffeine in tea, XII, 1141
- Cajanus cajan*, see Pigeon pea
- Calamagrostis* as fodder plant, XII, 1368
- Calamondin, juice content, XIV, (1875)
- Calcium—
 availability in different media, XIV, 1027
 -boron relationships in plant nutrition, XIV, 447, 448
 carbide as growth promoter, XII, 8
 cyanamide—
 for bracken control, XV, 113
 as fertilizer, XIV, 1515
 as soil disinfectant, XIV, 1641
 deficiency symptoms, XI, 485; XII, 999; XIV, 554, 674
 determination in plants, XIV, 1008
 needs of lettuce and spinach, XIV, 1747
 pectate, the tissue firming compound in tomato canning, XII, (708)
 in soil, exchange, XII, 21
 in vegetable juice, XIII, 323
- California—
 deciduous fruit problems, XV, (505)
 home fruitgrowing, XI, 35
- Calines in X-rayed seed, XIII, (367)
- Caliroa limacina*, XIV, 1610
- Calla root rot, *Phytophthora richardiae*, XV, 769
- Callusing in higher plants, XII, 12, 13
- Calocoris*—
fulvomaculatus, XII, 1397; XIV, 1610
norvegicus, XIV, 588
- Calomel for onion pests, XII, 487; XV, 1149
- Caloncoba welwitschia* source of chaulmoogra oil in Fernando Po, XV, 271
- Calostilbe striispora* disease of immortelles, XI, 963
- Camellia—
 culture in Florida, XV, (774)
 fumigation, XIV, 831, 1809
- Camera, Speed Graphic synchronized flash, XIV, (1476)
- Cameroons, improvement of cacao, oil palm and rubber in, XIII, 286
- Campden fruit preserving tablets, XII, 1106
- Campden Fruit and Vegetable Preservation Res. Stat.—
 A.R. 1943, XIV, 2018
 origin and war work of, XIV, 969
- Camphor—
 basil (*Ocimum canum*)—
 amphidiploidy induced by colchicine in, XII, 757, 758
 cultivation, XIV, 723, 1246
 seed viability, XI, 1346
 (*Cinnamomum camphora*) production in the Empire, XI, 1414
- Canada—
 the apple industry, XV, 1409
 Department of Agriculture, organization and activities, XV, 371
 Dominion Experimental Stations, work of, XI, 1021
 Minister of Agriculture for Dominion, A.R. 1939/40-1941/42 and 1943/44, XI, 1021; XII, 322; XIII, 662; XV, 925
Prunus in Eastern, XI, 36
- Canada (continued)—
 publications of Department of Agriculture, list, XV, 927
 scientific and technical societies in, XIII, 339
- Canadian—
 Committee on Food Preservation, A.R. 1941-1943, XIV, (968), 2019
 Horticultural Council, Committee on Horticultural Research, Report 1943, XIV, 953
 Horticultural Council, Rep. 20th annu. Meet. Feb. 1942, XIV, 952
- Cananga odorata*, a pest of, XV, 841
- Canarium ovatum*, see Pili nut
- Canavalia* species—
 food values, XIV, 1424
gladiata and *ensiformis*, XIV, 364, 1424
 trials in Queensland, XV, 387
- Candying—
 citrus peel, XIV, 1994
 of fruit, XI, 1471
- Canker worms (*Paleacrita vernata* and *Alsophila pometaria*), XII, (462)
- Canna*—
indica mosaic, XII, 243
 planting of edible, XI, 567
- Cannabis sativa*, see also Hemp—sex differentiation tests, XIV, 440
- Canned—
 foods—
 effect of freezing on, XIV, 1983
 tin determination, XV, (1336)
 fruits—
 and vegetables, sweetness control in, XI, 1475
 vitamin C content, XIII, 324, 1610
 vegetables, vitamin content, XIII, 324, 1610
- Canning—
 apples, XI, 303, 1472
 asparagus, XII, 1543
 black plate ends, use in, XIV, 2018
 cactus, XI, 306
 carrots, XIV, 1428; XV, 2032
 cherries, XV, 2030
Clostridium botulinum checks, XIV, 1428
 corrosion problems, XIV, 2018; XV, 1330, (1336)
 fruits, XI, 633, 634; XIII, 1071; XIV, 2018, 2019; XV, 2012
 fruits, firmness increased by calcium chloride, XV, 374
 guava, XIV, 394; XV, 1313
 home, XIII, 1071, 1611
 hydrogen swells, tests of, XIV, 2018; XV, 1330 in India, XI, (1506); XII, 1152
 mango, XIV, 393
 manual, XI, 1013
 methods, a comparison, XV, 2012
 peas, XIII, 651; XIV, 2018
 peach, see Peach
 pears, see Pear
 pineapples, see Pineapple
 progress, XII, 315
 strawberries, XIV, 1425
 tin plate and black plate investigations, XIII, 1609
 tomatoes, see Tomato
 vegetables, see Vegetables
- Cantaloupe—
 cucumber grafts inoculation with *Fusarium* sp., XV, (596)
 mildew (*Peronosplasmopara cubensis*), resistance to, XIV, 1753

SUBJECT INDEX

- Cantaloupe** (*continued*)—
 leaf spot, a physiological, **XIII**, 923
 precooling tests, **XV**, (2011)b
Cantharis livida on strawberry, **XIV**, 1610
Cape gooseberry (*Physalis peruviana*)—
 cultivation, **XI**, 597; **XII**, 1368; **XIV**, 531;
XV, 75, 536
 iron and manganese nutrition, **XV**, 536
Capitophorus fragariae, see Strawberry aphid
Capitophorus potentillae vector of strawberry viruses,
XI, 1518
Capnodis root borer control, **XI**, 1184
Capsicum, see also Chillies, Pepper and Pimento
Capsicum—
 annum—
 ascorbic acid content, **XIII**, 491
 German and Swedish trials, **XIV**, 636, 696
 as ornamental, **XIII**, 492
 fruits, vitamin C in, **XIV**, 1964
frutescens—
 cultivation methods, **XI**, (1238)
 fruit, **XI**, 1237
 mosaic, **XIII**, (1032)
 growing—
 in Brazil, **XV**, (758)
 in Morocco, **XIII**, 898
 in S. Africa, **XII**, 222
 spp. in Queensland, **XV**, 387
Caraway (*Carum carvi*) growing conditions affect
 composition, **XV**, 162
Carbohydrates—
 in apple trees, nitrogen and, **XIII**, 53
 content related to protein synthesis in leaves,
XIII, 691
 molecular equivalence to CO₂ in photo-
 synthesis, **XIII**, (697)
Carbolineum—see Sprays and spraying
Carbon—
 assimilation and stomatal movement, **XI**,
 (1073)
 bisulphide—
 for insect pest fumigation, **XV**, 587
 for soil sterilization, **XV**, 259
 vapour as herbicide, **XIII**, (129)
 dioxide—
 determination colorimetrically, **XII**, (1195)
 investigations: dry ice to help refrigeration
 of plums in transit, **XIV**, (1955)
 photosynthesis—
 absorption during, **XIV**, 989
 depressant effect on, **XII**, 740
 evolution during, **XII**, (752)
 radio active, used by sunflower leaves, **XI**,
 680
 seed germination in, **XV**, 607
 virus susceptibility diminished by, **XV**,
 219
 disulphide, see bisulphide
 estimation in plant tissue, **XIII**, (1138)
 tetrachloride fumigation, **XIII**, 1571
Carbowax as carrier for growth substances, **XV**,
 426
Cardamom—
 beetle (*Prodictes haemiticus*), **XI**, 1396
 cultivation—
 in Ceylon, **XIV**, 955
 in Mysore, **XI**, 568
 in South India, **XIII**, 288
Carica papaya, see also Papaw—nyctinastic move-
 ment in, **XI**, 541
Carludovica palmata source of panama hats, **XII**,
 1016
- Carnation**—
 cultivation in nutrient solutions, sand, gravel,
 etc., **XIV**, 294, 825-827, 1303
 mosaic and other viruses, **XIV**, (297); **XV**,
 764
 nutrition, **XIII**, 233
 photosynthesis affected by light intensity,
XIII, 232
 rust, eradicant action of fungicides on, **XIV**,
 617
 sleepiness in, **XII**, 986
 thrips control, **XIII**, 1455
 wilt (*Fusarium dianthi*), **XIV**, 1304
Carnegie Institution, Div. Plant Biology, A.R.
 1939/40 and 1940/41, **XI**, 1022; **XII**,
 1149
Carob (*Ceratonia siliqua*)—
 cauliflory in, **XIII**, 352
 roots, aerial, **XIV**, (1063)
Carotene, see also Vitamin A—
 analysis of vegetables and fruits, **XI**, (1506)
 in asparagus, **XI**, 1491
 in beans, **XI**, (131), 1491
 in canned vegetables, **XV**, 881
 in carrot, **XIII**, 908; **XV**, 907, 1316
 concentration from vegetable leaf wastes,
XV, 1315
 content, manuring affects, **XIV**, 1673
 degradation in dehydrated carrots, **XV**, 331,
 887
 determination, **XI**, 1491, 1492; **XIII**, (375);
XIV, 1971; **XV**, 330
 extraction from plant material, **XII**, (295);
XV, 2025
 losses in store, **XII**, 1535
 photochemical destruction, **XV**, (1336)
 in plant tissue, report on, **XI**, (1092)
Ribes aureum a source of, **XIII**, 71
 in rose hips and other fruits, **XIV**, 1960;
XV, 2025
 in soya bean, **XI**, (131)
 sources, **XV**, 1329
 stability in green vegetable extracts, **XIV**,
 410
 in sweet potatoes, **XIII**, 262
 in vegetable juice, **XIII**, 323
 in vegetables, **XI**, (131); **XII**, 292; **XIV**, 1963;
XV, 883
Carotenoids, **XI**, 1489; **XIV**, (412)
Carpocapsa pomonella, see Codling moth
Carpodinus hirsuta, a rubber plant, **XIV**, 716
Carpotroche brasiliana in Tucumán, **XII**, 1583
Carrot—
 ash constituents affected by manuring, **XII**,
 913
 bacterial blight (*Phytomonas carotae*), **XIV**,
 1731
 black rot (*Alternaria radicina*), **XII**, 950;
XIII, 911
 breeding, **XIII**, 1096; **XIV**, (729)
 canning problems, **XIV**, 1428
 carotene—
 content affected by manuring, **XII**, 949;
XV, 1316
 content as basis for breeding, **XIII**, 908
 degradation in, **XV**, 331, 887
Cercospora blight, **XIII**, 910
 Chantenay, quality and relation to seed
 production, **XIII**, (231)
 crown division aid to breeding work, **XIV**,
 1729
 dehydrated, quality in, **XIV**, 1979; **XV**, 2032

SUBJECT INDEX

- Carrot (*continued*)—
 dehydration—
 syrup treatment and, XIV, 1978
 varieties for, XV, 342
 and vitamin content, XIV, 1405; XV, 907
 development, virus infection affects, XII, (1454)
 developmental anatomy, XI, 466
 diseases, XI, (1278); XII, 147, 907
 fertilizers, phosphatic, XIII, 459
 flowers, black, XIV, (729)
 fly (*Psila rosae*), XII, 951, (982); XIII, 183,
 920, 1405, 1633; XIV, 548, 726, 727, (729);
 XV, 194, 683, 944, 1755, 1756
 as food, XI, 465
 glasshouse varieties, XIII, 1339
 as green food substitute, XI, 802
 growing—
 in England, XI, 801; XIII, 907
 in Tasmania, XV, (1853j)
 growth inhibited by growth substances,
 XIV, 1533
 juice and treacle, XIII, (1087)
 leaf diseases, varietal resistance to, XIV, 1732
 manuring, XII, 913, 949, 959; XIII, 909,
 919, 1095, 1395; XV, 680
 manuring, minor element importance in,
 XIV, 1730
 market diseases, XII, 907
 microscopical studies, XV, 1325
 protein-ascorbic acid complex in, XIV, 1967
 quality investigations, XIV, (729)
 roots, shape affected by manuring, XIII, 1395
 rust fly, *see* fly
 salting, XV, 1333
 seed production, XII, 1352; XIII, 137, 1394;
 XIV, 1188
 seed stalk development, XIII, 1393
 seedling—
 blight (*Alternaria radicina*), XII, 950;
 XIII, 911
 colour a distinguishing mark, XIV, 1248
 soft rot, XIII, 860; XV, 1754
 storage—
 in clamps or cool stores, XIV, 914, 916
 disease, black rot, XII, 950
 domestic, XV, 320, 876
 preservatives used in, XIV, 375
 sphagnum moss for, XIV, 2019
 vitamin changes during, XII, 1532
 sugars in root, XV, 681, 1316
 surplus, utilization of, XII, 1117
 treacle, XII, 1117
 varieties—
 American, XIII, 132
 for dehydration, XV, 342
 vernalization, XII, 908
 virus, XI, (1454); XV, 682
 vitamin A in, XIII, 330
 vitamins in dehydrated, XIV, 1405; XV, 907
 weed control, XIV, 728, 744, (1803); XV,
 684, 1703
 weevil (*Listronotus latiusculus*) control, XII,
 1420
Carthamus tinctorius, *see* Safflower
Cascara (*Rhamnus purshiana*)—
 propagation, XII, 522
 in Tucuman, XII, 1583
 Cashew nut (*Anacardium occidentale*)—
 cultivation, XI, 591, 1421; XII, 1515; XV, 854
 as fence plant in Cuba, XV, 1236
 industrial uses, XII, 307
 origin and distribution, XI, 1351
Casimiroa edulis, XIII, 987; XV, 1908
Cassava (*Manihot utilisima*)—
 cuttings, XI, 1366
 diseases in Uganda, XV, 816
 drying, XIV, 1437
 flowers, bisexual, XV, (1298)
 growing—
 in Amazon Valley, XIII, 272
 in Brazil, XII, 612
 in Mauritius, XII, 611
 in the tropics, XIII, 1010; XV, 1931
 hydrocyanic acid content, XV, 2057
 an indicator of root disease in rubber, XIV,
 1363
 leaf spot (*Cercospora henningii* and *C.*
 caribaea), XIII, 586
 long-term and short-term, XIV, 1887
 manuring, XV, 2072
 meal preparation, XIII, 272
 milk disease (*Bacterium manihotis*), XI, 915
 mosaic in relation to sowing date, XIII,
 1636
 mosaic resistance in, XI, 188; XII, 320
 nutritive value, XI, 551; XV, (2059)c
 origin and distribution, XI, 1351
 pests and diseases, XII, 612
 polyploidy induced by colchicine, XII, (273)
 propagation, XII, 1035; XIV, 875
 root disease, *Fomes lignosus*, XIV, 955
 starch, Nigerian, XIII, 654
 storage, XIV, 1951
 a tetraploid form, XV, 827
 trials in Ceylon, XIV, 875
 varieties and preparation in E. Africa, XV,
 354
Cassia—
 angustifolia, XII, 1583
 occidentalis cultivation, XV, 843
Castilla elastica, a rubber plant, XIII, 173, 175,
 608, 1543; XIV, 716, 1364; XV, 1973
Castor bean (*Ricinus communis*)—
 cultivation—
 in Algeria, XV, (1852)b
 in Ceylon, XIV, 345
 in Dutch East Indies, XII, 250
 in Illinois, XV, 178
 in Jamaica, XV, 1353
 in S. Paulo, XI, 494
 disease (*Alternaria ricini*), XV, (1298)
 insecticidal properties, XIV, 632; XV, 937
 isolation of proteins from, XIV, (2003)
 manuring or nutrition, XIII, 900; XIV,
 1230-1232
 as oil source, XIV, 706
 scab (*Sphaceloma ricini*), XV, 1838
 seed—
 composition, XII, (273)
 production in Brazil, XI, 210
 treatment, XV, 651
 seedling blight (*Alternaria compacta*), XIV,
 1233
 sheller, XV, 179
 stem blight (*Fusarium* spp.), XII, 1409
 tetraploidy induced by colchicine in, XII,
 (1412)
 Catalogue of insecticides and fungicides, XIV, 615
 Catch crop cultivation in (Russian) Central Asia,
 XV, 1674
 Cation-anion balance, role of ether-soluble organic
 acids in, XIII, (690)
 Cations, selective absorption, XII, 20
 Cattley (*Psidium littorale*), XV, 1229

SUBJECT INDEX

- Cattleya orchid seed, vitamin B₁ helps germination, XV, 1188
- Cauliflory in the carob, XIII, 352
- Cauliflower—
 black rot (*Bacterium campestre*), XIV, 1260
 boron deficiency, XII, 1424
 breeding, XIV, 245
 diseases, XI, 1245
 manuring, XI, 110; XII, 495; XIV, 1745; XV, 1776
 origin of, XI, (1244)
 seed plants, downy mildew disease (*Peronospora brassicae*), XIV, 757
 seed production in tropics, XV, 1991
 storage, XIV, 378
 transplanting, "starters" used when, XII, 496
 virus in, XIII, 188
 vitamins B₁, ₂ and ₃ have little effect on, XII, 347
 whip tail disease, XI, 1245; XIV, 246
- Cawthron Institute A.R. 1939-1942 and 1943/44, XI, 326, 1512; XIII, 1092; XIV, 954; XV, 372
- Ceara rubber (*Manihot glaziovii*), XIII, 1386; XIV, 716
- Cedar-apple rust (*Gymnosporangium juniperi-virginianae*), XIII, 1277; XIV, 129, 1137, (1662)
- Cedar tree, an account, XIV, 1311
- Ceiba pentandra*, see Kapok
- Celastrus* spp. insecticidal plants, XIV, 1657
- Celeriac—
 boron deficiency, XIV, 248, 1264
 storage in clamps, XIV, 914
- Celery—
 blight (*Septoria apii*), XIV, 1451, 1751; XV, 1156, 1781
 boron deficiency, XII, 967; XIII, (231)
Cercospora apii, spraying for, XIV, 616; XV, 706
 cracked stem, XIII, (231)
 damping off, XV, 704
 flowering, temperature affects, XV, (758)
 harvesting in Florida, XV, 1780
 leaf spot, see blight
 market diseases, XII, 907
 mosaic, XIII, (231)
 pink rot (*Sclerotinia sclerotiorum*), XV, (758)
 seed germination, XIV, 645
Septoria apii—see blight
 soft rot, *Erwinia carotovora*, XV, 705
 storage rots, XIV, 1265; XV, 2008
 stored, vitamin changes in, XII, 1532
- Cell(s)—
 constituents, fungicidal action of reagents for, XV, (598)
 epidermal, effect of cuticular hardening on, XIII, (690)
 length, relation to stem length, XII, (752)
 palisade, elongation, XIII, 6
 properties of surface, of plant, XIV, 1016
 walls in plant tissue, XII, (18)
- Cellobiose from birch sap, XII, 1137
- Cellulose—
 potato haulms a source of, XII, 1136
 possibilities in West Africa, XIII, 1505
- Celodol as plant preservative, XIII, 29
- Celtis occidentalis* an ornamental tree, XV, 233
- Celutze, a new vegetable, XII, 963; XIII, 516
- Census of English fruit farms, a plea for, XIII, 1141
- Centaurea picris* or Russian knapweed, XIV, 1163
- Central America research institutes, XII, 728
- Central Europe, economic plants of, XIII, 903
- Centrosema pubescens*—
 as ground cover for rubber, XI, 1409
 manuring, XII, 642
- Cephaelis ipecacuanha*, see Ipecacuanha
- Cephaleuros*—
 parasiticus, XIII, 275
 virescens, XI, 586
- Cephalosporium lecanii* a scale-controlling fungus, XIII, 1012
- Cerasus besseyi* × *C. tomentosa* hybrids, XII, 797
- Ceratitidis capitata*, for detail see Fruit fly, Mediterranean, XI, 82; XII, 567; XIII, 1497; XIV, 853, 1327; XV, 1612
- Ceratomia siliqua*, see Carob
- Ceratostomella radiclecola* on date palm, XIII, (264)
- Cercopis sanguinea*, XI, 1175
- Cercospora*—
apii, XIV, 616; XV, 706
carotae, XIII, 910; XIV, 1732
cladosporioides, XIV, 1146
musae, see Banana leaf spot
nicotianae, XI, 191, 916; XIII, 588, 891
personata of peanut, XI, 1424
sesami, XII, 632
 rots on stored celery, XIV, 1265
 spp. causing cassava leaf spot, XIII, 586
- Cercosporaella*—
albomaculans, XV, (597)
brassicae, XIV, 725
persicae, XIV, 582
- Cerium in pea nutrition, XIII, 535
- Ceroplastes sinensis*, XIV, (1662)
- Cerosipha* spp. on guayule, XV, (1852)m
- Cerotelium fici*, XII, 121
- Certification, see also Legislation, Regulations, etc.—
 of horticultural material in U.K., XIII, 1140
 of horticultural material in U.S.A., XIV, 492
 of nursery stock—see Nursery
 of sprays in New Zealand, XIII, 1309
 of sprays in Switzerland, XIII, 1310
- Ceutorhynchus*—
 on cabbage, control of, XIV, 753
quadridentis pest of oil plants, XIV, 215
- Ceylon—
 coconut and coir industries, XIII, 1619
 Coconut Res. Scheme, A.R. 1940-1942, XI, 1023; XIII, 1093; XIV, 1437
 Dir. Agric. Administ. Rep. 1939-1942, XI, (1054); XII, 323; XIII, (672); XIV, 955
 foodstuffs, analysis, XIII, 587
 fruitgrowing in, XII, 1070
- Chaetoanaphothrips orchidii*, XI, 868
- Chambers—
 controlled environment, XIII, 1106; XIV, 1118, 1177, 1459; XV, 953, 1393
 for observing temperature and photoperiod relations, XIV, (19)
 refrigerated plant culture, XIII, 30; XIV, (1184)
- Chapote, the yellow, host of Mexican fruit fly, XII, (235)
- Charcoal from coconut shells, XII, 310
- Chat fruits, see Lord Lambourne apple
- Chaubattia Fruit Research Station, work at, XI, 1524
- Chaulmoogra (*Taraktogenus kurzii*), cytology of, XV, 1953
- Chaulmoogra oil—
 from *Caloncoba welwitschia*, XV, 271
 in Ceylon, XIII, 603
 production in Fiji, XIV, 1909

SUBJECT INDEX

- Chayote, *see* *Sechium edule*
 Cheki, *see* Sapodilla
Cheletogenes ornatus predator of citrus bud mite, XV, 797
 Chemical analysis, methods, XV, 406
 Chemistry, agricultural, origins of, XIV, 2006
Chemistry and Industry, number devoted to Empire production, XI, 374
 Chemistry, Russian agricultural, XIII, 1
 Chemotherapy of tree diseases, *see also* Injection, XIII, 118, 801, 802
Chenopodium—
 album potash content, XV, 115
 amaranticolor as a vegetable, XIII, 180
 ambrosioides L. var. *anthelminticum* a source of oil, XI, 1239, (1506); XIII, 168
 guinoa, XII, 1500
 Cherimoya, *see* Custard apple
 Cherry—
 aphid—
 bird (*Rhopalosiphum padi*), XIV, 1151
 black (*Myzus cerasi*), XIV, 598
 bacterial canker (*Pseudomonas mors-prunorum*), XIII, 102; XIV, 1597; XV, 557
 bacterial diseases, XIII, 1269
 banded chlorosis virus, XIII, (101)
 bleaching, sulphur for, XIV, (1431)
 blossom, sugars in, XV, 478
 boron deficiency, XIV, 1572
 Brazilian, *Eugenia dombeyi*, XV, 271
 breeding for frost resistance, XIV, 485, 491
 brining, cracking problem in, XI, 307
 buckskin disease, XII, 114
 candying, XI, 1471
 canning, XV, 2030
 chromosomes and fertility, XI, (390)
 Cylindrocadium shoot wilt in layers, XIII, 1279; XV, 100
 cuttings, flowering hybrid, XV, 52
 deficiency symptoms, XIV, 121, 1572; XV, 1544, 1546
 dehydration, XIII, 1060
 distinguishing characters of sweet, acid and Duke, XIII, 1156
 drought resistance in *Prunus besseyi*, XIV, 1120
 fly (*Spilograpta cerasi*) in Sweden, XIII, 1295
 Fomes pomaceus on, XII, 1302
 Formosan (*Prunus campanulata*), paternal habit, XIV, 1309
 fruit fall in morello, XIV, 68
 fruit fly (*Rhagoletis* sp.), XII, (462); XIV, 116, 599, (635), 1152; XV, 1611
 fruit moth (*Argyresthia nitidella*), XV, 1626, 1627
 Gloeosporium rot, XIV, 1145; XV, 1581
 grafting, XI, 40, 78; XIII, 1159; XV, 51
 growing—
 in Adelaide Hills, XIV, 468
 in Colorado, XV, 39
 in Sweden, XV, 445
 Hungarian acid, composition of, XIV, 404
 hybrids, XII, 797; XIII, 42
 incompatibility, XIII, 665
 interval between flowering and fruit maturity in, XII, 1240
 Japanese, XV, 229
 juice manufacture, XI, 625; XII, 679; XIV, 937
 leaf spot (*Coccomyces hiemalis*), XI, 78; XII, 446, 862, 1302; XIII, 819; XIV, (547), 614, 1137; XV, 557, 1053, 1582
 Cherry (continued)—
 leaf yellowing, premature, XV, 90
 mahaleb, *see* rootstocks, mahaleb
 manganese deficiency, XIII, 1253; XV, 1544, 1546
 manuring, artificial, XIV, 1514; XV, 485
 mazzard, *see* rootstocks, mazzard
 Monilia cinerea causes leaf disease, XI, (77)
 morello—
 blossom blight and leaf spot, XII, 1302
 rootstocks for, XII, 1237
 mottle leaf, XI, 1159
 origin of cultivated, XV, 975
 pests, XIII, 431; XIV, 587
 phenological observations on sweet, at Geisenheim, XI, 395
 planting, plans for, XV, 1459
 plum, *see* *Prunus cerasifera*
 pollination, XI, 45, 389, (390), 1105; XIII, 665; XV, 40
 rasp leaf of, XIII, 99, 1263; XV, 374
 rooting of bird, in stool bed, XII, 1224
 rootstocks—
 in France, XV, 995
 in Germany, XII, 1233
 in Italy, XI, 712; XII, 800
 layering, XII, (383)
 mahaleb—
 variation in, XIV, 1488
 versus mazzard for sweet, XV, 1445
 mazzard—
 excessive rooting at collar, XIII, 1245
 seed stratification, XIV, 1188
 Sargent's, XII, 1221; XIV, 1310
 at Vineland, Ont., XI, 1050, 1525; XV, 1445
 scab (*Fusicladium cerasi*), XIV, 1603
 Sclerotinia spp. on, XI, (1174); XV, (598)
 soil moisture and, XIII, 397
 sprays—
 affect size and colour, XV, 1582
 deposition on leaves, XV, (598)
 fungicidal, XIV, 614
 preharvest, XIV, 154
 storage, XI, 972; XII, 1526; XIII, 1560; XV, 944
 topworking, XII, 1221
 types of Spanish Glass, or Transparente d'Espagne, XII, 786
 the Ural acid, XIII, 1155
 varieties—
 English, XV, 41, 983
 the Merton, XIV, 960
 Ron's Seedling, XIV, 1487
 Swedish, XIV, 472, 473; XV, 1428
 Williams Favourite, XIV, 468
 viruses, XI, 1159; XII, 114; XIII, 99, (101), 1262, 1263; XIV, 570, 572; XV, 374, (598), 1025
 yellows, XIII, (101); XIV, 572; XV, (598)
 Cheshunt exp. Res. Stat.—
 A.R. 1940, 1941 and 1943, XI, 1024; XII, 1575; XV, 373
 experimental results in 1942, XIII, 1339, 1340
 Chestnut—
 growing in the U.S.A., XII, 91
 horse, utilization, XV, 193
 self sterility in Chinese, XIII, 1235
 Chicle, XI, 314
 Chicory—
 cultivation, XIII, 922; XV, 707
 flies (*Ophiomyia pinguis*), XV, 1783

SUBJECT INDEX

- Chicory (*continued*)—
 forcing, XII, 501; XV, 1784
 production figures for S. Africa, XV, 1362
 seed production, XI, 1246; XIV, 1188
- Chile—
 fruit production, XII, 781
 horticulture in, XV, 974
- Chillies, *see also* *Capsicum*—
 cultivation, XIII, 1529
 emasculation, XI, 1082
- Chilling requirements of deciduous fruits, XII, 60, 61
- Chimaeras—
 apple, Sweet and Sour, XV, 442
 citrus, XIV, 1318
 graft hybrids and, XI, 17; XII, 9
 of *Lycopersicon* and *Sansevieria*, XV, (431)
- Chinese—
 gooseberry, *see Actinidia chinensis*
 tallow tree (*Sapium sebiferum*), XV, 268
 water chestnut (*Eleocharis tuberosa*), XV, (1658)
- Chionaspis furfura*, XIV, 1150
- Chlorella*, photosynthesis and phosphorylation in, XIV, 986
- Chloride(s)—
 ions, response of Valencia orange to, XII, 998
 peach response to high, XIII, 1185
 in plant nutrition, XII, 465
 salts in plants, XII, 1191
- Chlorine—
 in ash of fruit products, XIII, 1585
 in date palms, XV, 859
 as seed disinfectant, XI, (380)
 toxicity, XI, 376
- Chlorobenzoic acids, XV, 721, (1406)
- Chlorophenoxy acids, XIV, 1816; XV, 422, 426, 510, 721, 722, 937, 1105, 1106
- Chlorophyll—
 in the chloroplast, state of, XIII, 1130
 determination, XI, (1092); XII, (752); XIII, 26; XIV, 1971
 iron necessary for synthesis, XIV, 560
 a plant pigment, XI, 1489
 -protein complex in legumes, XIII, (697)
 -protein compound of green leaf, XIII, 1129
- Chlorophylls *a* and *b*, examination by spectrophotometric methods, XII, (752); XIII, 1128
- Chloropicrin—
 effect on N nutrition of pineapple, XIV, 361
 for eelworm control, XII, 181, 958; XIII, 217; XIV, 661
 fumigation for pea weevil, XIV, 1953
 for lettuce soils, XIII, 194
 for weed and Japanese beetle control, XIV, 1683
- Chloroplasts—
 oxygen evolution from, XV, (1406)
 state of chlorophyll in, XIII, 1130
- Chlorosis—
 causes, various, XII, 1300; XIII, 94
 in cherry, control of, XIII, 1253
 in citrus, XII, 559
 of deciduous fruit trees, XIII, 804, 1250; XV, 374
 iron deficiency, XIII, 1547
 lime induced, XII, 559; XIII, 804; XIV, 559, 1113, 1571; XV, 87
 in *Macadamia*, XIII, 1547
 in tomato, XIII, 209, 1249
 in vine, *see* Vine
- Chlorotic plants; photoperiodism in, XIV, 993
- Choco and Choko, *see Sechium edule*
- Chokecherry (*Prunus virginiana*), X disease of, XII, 111, 112
- Chondrilla juncea*, XII, (1333)
- Chondrus crispus*, use in foods, XV, (2059)
- Chortophila cilicrura*, XV, 2079
- Christophine, *see Sechium edule*
- Chromaphis juglandicola*, XV, 1600
- Chromosome(s)
 atlas of cultivated plants, XV, 2065
 chemistry of, XI, 1089
 and fertility in cherry, XI, (390)
 and vitamin content, XIII, 236
- Chrysanthemum—
 angle shades moth (*Brotolomia meticulosa*), XI, 509
 blossoming time controlled by light manipulation, XIV, 291
 cultivation in Brazil, XV, (774)
 cuttings, XI, 1059; XII, 338; XV, (774)
 growth substances and, XI, 1059; XII, 338, 339
 a handbook, XIV, (297)
 manuring, XIV, (834)
 midge (*Diarthronomyia* spp.), XIII, 948, 1457
 nematode treatment, XV, (598)
 short day affects, XI, 1292; XIV, 1808
 stock : scion effects, XII, 540
- Chrysil, a rubber from *Chrysothamnus nauseosus*, XIII, 1379
- Chrysobothris femorata*, XV, 106
- Chrysolina hyperici*, XV, 372
- Chrysomphalus aonidum*, XV, 942, 1214, (1232)
- Chrysophyllum cainito* budding, XI, 946
- Chrysothamnus* spp. rubber plants, XIII, 499, 1379
- Chucu, *see Sechium edule*
- Chungking, nat. agric. Res. Bur., Rep. 1938, XII, 325
- Cicer arietinum*, XII, 1447
- Cidaria immanata* on strawberry, XIV, 1610
- Cider—
 apple(s)—
 growing in Tipperary, XIV, (528)
 rootstocks for, XII, 796; XIII, 738; XIV, 1478
 varieties, XV, 980
 vintage quality on bush trees, XIV, 1478
 frozen pack, XI, (291)
 lead determination by spectrography, XII, (708)
 making, XIV, (1431); XV, 345
 sparkling, XI, 1465
 sugar retention in, XI, 999
 Uruguayan, XV, 1323
- Cinchona—
 alkaloid identification, XIII, 707
 bibliography, XV, (1995)
- cultivation—
 in Belgian Congo, XIV, 1352, 2017
 in British Empire, XI, 1400
 in Ceylon, XIV, (903)
 in Dutch East Indies, XI, 211
 in Guatemala, XI, 1401
 in India, XI, 573, 937; XIII, 1532
 in Nigeria, XV, 940
 in Portuguese Colonies, XIII, 1534
 in Russia, XIV, 974
 cuttings, XV, 1400
 in Ecuador, wild, XIV, 346
 missions in S. America, XV, 1290
 origin and distribution, XI, 1351

SUBJECT INDEX

Cinchona (continued)—

- plant bugs (*Helopeltis* spp.), XII, 1047; XV, 298
- pollen storage, XIV, 1911
- production, methods for increasing, XIII, 1018, 1534
- propagation—
 - by grafting, XV, 1955
 - growth substances in, XIV, 1466; XV, 1235
 - research at West Java Research Station, XII, 251, 619
 - from seed, XIII, 1533
 - shading, XI, 574
 - species, alkaloid contents in Ceylon, XIV, 955
 - trials—
 - in Mauritius, XIV, 1444
 - in Queensland, XI, 1521
 - wilt and stem canker, *Phytophthora parasitica*, XV, 846

Cinnamon (*Cinnamomum zeylanicum*)—

- cultivation in Guatemala, XI, 935; XV, 1948
- origin and distribution, XI, 1351

Cinnamomum tamala and *C. obtusifolium*, XV, 1287

Citrange, seed and seedling yields, XIII, 1466; XV, 1363

Citrangequat, mandarin graft hybrid, XII, 203

Citrate from fruits, extraction, XIV, 927

Citric acid production by *Aspergillus niger*, XIV, 1294

Citric and isocitric acids in blackberries and dewberries, XIV, 928

Citrin, crude, from lemons, XI, (1506)

Citron plant bug (*Leptoglossus gonagra*), XI, 1328

Citronella cultivation, XIV, 955

Citrullus colocynthis trials in Queensland, XV, 387

Citrumelo investigations, XV, 1363

Citrus—

- acorn or stubborn disease, XIV, 1322
- Argentine ant pest, XII, 1475
- at Asuansi, Gold Coast, poor condition, XV, 932
- aurantifolia* var. Swingle, propagation, XV, 1874
- bark, colorimetric tests of, XI, 1307
- bark eating borer, *Indarbela quadrinotata*, XV, 1897
- belt of California, peaches for growing in, XV, 458
- botany, XIV, 946
- branch borer in Queensland, XIV, 314
- breeding, XIV, 946
- bridge grafting, XV, 1875
- brown rot (*Phytophthora* spp.), XII, 216, 1003; XIII, 254, 257, 552; XIV, 846-848, 1324, 1839; XV, 257
- bud(s)—
 - indoleacetic acid does not regenerate adventitious, XI, 849
 - mites (*Eriophyes sheldoni* and *Tarsonemus bakeri*), XII, 564, 1473; XV, 797
 - selection, XIV, 301
- budding—
 - in New Zealand, XII, 46
 - in Punjab, XIV, 300
 - in Surinam and Dutch East Indies, XI, 145
 - troubles, XI, 522
- by-products, XI, 1009, 1504; XII, 301, 697, 1139, 1140, 1157; XIV, 422, 974, 1423; XV, 894, (1914)d
- canker (*Pseudomonas citri*), XII, 1004; XIV, 1838

Citrus (continued)—

- as cattle food, XII, 301, 697, 1139, 1140, 1157; XV, (1914)d, e
- chimaeras, XIV, 1318
- chlorosis, XII, 559
- chromosome numbers, XIII, 1463
- classification, Swingle's new, XIII, 957
- cold resistance, effect of manuring, XIV, 839
- collar rot (*Phytophthora citrophthora*), see also foot rot, XIII, 255, 256, 974
- collection at Antibes, XV, 1367
- cover crops, XV, 1348
- in culture solutions, effect of gallium and indium on, XIV, 304
- cuttings—
 - and budlings, initial and subsequent size of, XI, (872)
 - growth substances and, XI, 846
 - propagation under artificial light, XV, 1400
- decline—
 - in California, XV, 256, 1200, 1887
 - due to soil nitrites, XIII, 1474
 - in Murrumbidgee Irrigation area, XIII, 256; XIV, 307
 - relation of root injury to, XIII, 551
- deficiencies and their symptoms, XII, 558, 999, 1468; XIII, 249, 250; XIV, 1575, 1829, 1831; XV, 791, 1202-1204
- dieback diseases, XV, 380, 1888
- Diplodia* diseases, see also Orange stem end rot, XII, 1471; XIV, 1436; XV, 1206, 1207
- diseases, see also under specific names—
 - in Algeria, XV, 1885
 - a manual, XII, 1143
 - in Punjab, XV, 1886
- dry root rot (*Diplodia natalensis*), XII, 1471; XIV, 1436
- drying for marmalade, XII, 1125; XIV, 1419
- erosion in California, XIII, 1477
- exanthema, XIV, 1829
- experimental station at Burnihat, XI, 1018
- exports from S. Africa, XI, 518; XII, (1009)
- false codling moth (*Argyroplece leucotreta*), XIII, (982); XIV, 631
- fiddler beetle pest (*Prepodes* spp.), XI, 1327
- foot rot (*Phytophthora parasitica*), XIII, 973
- frost—
 - damage—
 - in Argentina, XIII, 550
 - to juice, XI, 1319
 - repair, XI, 1318
 - hardiness, factors affecting, XI, 856-858
- protection—
 - heaters, XI, 151-153, 519, 859; XII, 561; XV, 1884
 - various methods, XIII, 549
- resistance—
 - in Abkhazia and Caucasus, XI, 1317
 - controlled by day length, XII, 1463
- frozen pack preservation, XI, 1455
- fruit—
 - anatomy, XV, 931
 - candying peel of, XIV, 1994
 - colour, XI, 853
 - composition, XI, 997
 - fly incidence and control, XIII, 977; XIV, 315, 853
 - macerates, XI, 998
 - measurements, XIV, 1821
 - nutritional, medicinal and bactericidal aspects, XI, (872)

SUBJECT INDEX

Citrus fruit (*continued*)—

- quality—
 - and irrigation, XIV, 305
 - from legal, marketing and other stand-points, XI, 837
 - residues, vitamin C in, XV, 1312
 - ridging as result of fumigation, XI, 1331
 - set not increased by growth substances, XIII, 1465
 - stomata, XI, 844
 - thick skinned and acid, remedied by superphosphate, XV, 1197
 - wastage research in Palestine, XV, 942
- fumigation, *see also* scale, XI, 1331-1334, 1336; XII, 1477-1479, (1480); XIII, (260), 558-560, (562), 979, 1481, 1482; XIV, 857, 1853; XV, 262, 1210, (1432)
- fungal infection, XIII, 254
- fungicides, cuprous oxide, XI, 1325
- grading, XV, 380
- green manuring, XII, 1001
- greening disease, XV, 252
- growing—
 - in Argentina, XIV, 835, 1450
 - in Bermuda, XIV, 1818
 - on Black Sea Coast, XV, 1196
 - in California, XI, 139; XII, 553
 - in Ceylon, manual on, XIII, 658
 - in Fiji, introductions at Nasinu, XI, 141
 - in India, *see also* in Punjab, XIII, 542; XIV, 298
 - in Lower Rio Grande Valley, varieties, XI, 1303
 - in New Zealand, XIV, 1313; XV, 383
 - in Nigeria, XV, 940
 - in Palestine in wartime, XI, 840-842; XII, 1157
 - in Punjab, XI, 142; XV, 1866-1868
 - in Rhodesia, XII, 990
 - in Santiago del Estero, XII, 989
 - in South Africa, XI, 1301
 - in Surinam, XV, 1869
 - in tropics, XIII, 958
 - in United Provinces of India, XIII, 542
 - in Uruguay, XII, 550
 - in Western Australia, XI, 838
- growth substances for cuttings of, XI, 846
- gummosis, *see also* brown rot, XI, 1324; XIII, 552
- harvesting, XIV, 1382, 1383
- history, XIV, 946
- hybrids—
 - rootstocks for, XI, 847
 - used as rootstocks, seed production in, XIII, 1466
- inarching, XII, 1147; XV, 1875
- industry, manual, XIV, 946
- intercropping, XV, 1871
- iron nutrition, XIV, 1830
- irrigation, XI, 146; XII, (39), 996, 1464, 1465; XIII, 971; XIV, 305, 1321, 1835; XV, 246, 250, 1005, 1876, 1877
- juice—
 - Australian work, XII, 1147; XV, 349
 - benzoic acid determination in, XV, 1321
 - clearing, XI, 299
 - Florida work on, XV, 894
 - frost damage affects, XI, 1319
 - fumigation and sprays affect, XI, 1336
 - home production, XIV, 389
 - mango pulp for colouring, XV, 350

Citrus juice (*continued*)—

- organisms surviving in, after pasteurization, XI, 298
- oxidation of, XI, 636; XII, (680)
- peel oil determination in, XIV, (1431)
- preservation by—
 - freezing, XI, 1455
 - SO₂, XIV, 942
- vitamin C in, XI, (1506); XII, 557, 1553; XIV, 1990; XV, 892, 1329
- layout on irregular slopes, XV, 247
- leaf—
 - ascorbic acid in, XV, 1870
 - diagnosis, XIV, 1826-1828
 - epidermal structure, XI, 845
 - fall, excessive, XII, 1000
 - injury due to KCl manuring, XI, 520
 - oil deposit determination on, XIV, 1852
 - magnesium deficiency in, XI, 1314; XII, 999, 1468, 1469; XIII, (562)
- manganese—
 - deficiency, XII, 214, 215, 999; XV, 1202
 - sprayed trees and fumigation injury, XIV, 857
- manuring, XI, 147, 520, 856, 861, 862, 1313; XII, 554, 555, 990, 1153; XIII, 1182, 1470-1472, 1475; XIV, 302, 303, 839, 1320, 1826-1828, 1832; XV, 246, 786, 1202
- marketing in S. Africa, XV, 1338, 1362
- mealybugs (*Pseudococcus* spp. and others), XI, 157, 158, 161; XIV, 1846; XV, 942
- Mediterranean fruit fly pest, XIV, 1327
- melanose, *Diaporthe* and *Phomopsis*, XI, 867, (872), 1323; XV, 874
- mentor methods with, XII, 992
- mesophyll collapse, leaf composition in cases of, XIV, 843
- mites—
 - Anychus verganii*, XIV, 311
 - Eriophyes sheldoni*, XIV, 855
 - red (*Paratetranychus citri*), XI, 1330; XIII, 561, (562); XIV, 1325
 - rust (*Phyllocoptes* and *Phyllocoptruta oleivorus*, XI, 529; XIV, 850; XV, 1214
 - Tarsonemus bakeri*, XII, 1472
 - Tenuipalpus* spp., XIV, 851
- mottle leaf, XIII, 1246; XIV, 1829; XV, 1204
- moulds (*Penicillium italicum* and *P. digitatum*), XI, 265, 273; XII, 1527; XIII, 1046; XIV, 874, 875, 930, 1383, 1893
- nailhead rust, XIV, 845
- Nanking University programme for, XII, 201
- neglected groves, regeneration, XI, 150; XV, 789
- nematode (*Tylenchulus semipenetrans*), XII, 563; XIII, 553, 980, 981, (1484); XV, 259
- nitrite toxicity to roots, XV, 4
- nitrogen—
 - nutrition and content, XV, 783
 - starved, failure of vetch to excrete nodule nitrogen when grown with, XIII, 1473
- nursery work and regulations in Georgia, U.S.S.R., XI, 1309
- oil—
 - determination of volatile, XV, (2059)a
 - production in the home, XI, 1484
 - sprays, XI, 1336; XII, (1480); XIII, 554
- overcrowding, pruning remedy, XV, 249
- packing, XI, 292, 293
- parthenocarpic fruit induced in, XI, 852; XII, 995

SUBJECT INDEX

Citrus (continued)—

- pectates, **XI**, 631
 pectin, ethylene affects recovery of, **XII**, 300
 peel, candying, **XIV**, 1994
Penicillium moulds, *see* moulds
pennivesicula as rootstock, **XV**, 936
 peroxidase, **XII**, 1138
 pests, **XI**, (608), 870; **XIII**, 258; **XV**, 258, 1894
 pH of growth media, **XV**, 779, 780
 phosphorus deficiency in, **XIII**, 249
Phytophthora infections, **XIII**, 254-257, 551, 552, 973, 974; **XV**, 256
 planting out, **XIII**, 970
Poncirus hybrids, leaf segregation in, **XII**, (1480)
 potash and nutrition of, **XI**, 1313; **XIII**, 1182
 poultry among, **XV**, (1232)
 production figures in N. Zealand, *see also* growing, **XV**, 383
 products—
 micro-organism counts in, **XIV**, 1991
 research in Florida, **XV**, 894
 propagation in the Punjab, **XV**, 1873
 pruning, **XI**, 150; **XII**, 211; **XIV**, 842, 1524, 1834; **XV**, 249, 1343, 1881-1883
Pseudococcus comstocki, *see* mealybugs
 psoriasis, **XI**, 521, 864, (872), (1320); **XIII**, 252; **XIV**, 308, 309, 1323, 1837; **XV**, 253, 792, 1890
 psylla (*Spanioza erytreae*), **XIV**, (858)
 pulp as cattle feed, **XII**, 1139, 1140; **XIII**, 334
 pythiaceus fungi on, **XIII**, 253
 regeneration by cultural methods, **XI**, 150; **XV**, 789
 replanting, **XV**, 259
 research—
 in Arizona, **XIV**, 1436
 by Nanking university, **XI**, 1306
 in S. Rhodesia, **XIV**, 1817
Rhizophagus affects, **XV**, 255
 ringing, **XI**, 517
 ripeness and vitamin C content, **XII**, 557
 root—
 aeration, **XI**, 874
 growth, **XII**, 1461
 rots, various, **XIV**, 849; **XV**, 254, 777, 1209, 1891
 rooting, irrigation and, **XI**, 146
 rootstocks, **XI**, 143-145, 847, 850, 857, 1034; **XII**, 205, 1147, 1152, 1157, 1462; **XIII**, 256, 344, 543, 1094, 1466-1468, 1630, 1632, 1633; **XIV**, 955, 961, 1450, 1822-1825, 2025; **XV**, 369, 776, 777, 936, 1200, 1348, 1363, 1876, 2075
 rose weevil (*Pantamorus godmani*) injury, **XV**, 259
 scab (*Sphaceloma* spp.), **XI**, 1321, 1322
 scale—
 black (*Chrysomphalus aonidum*), *see* scale, Florida red
 black (*Saissetia oleae*), **XI**, 159, (530); **XII**, 1474; **XIII**, 559, (562), 978
 control—
 biologic, **XI**, 160, (530); **XII**, 1005, 1474; **XIII**, 556, (562), 978, 1478; **XIV**, 1452, 1842; **XV**, 1896, (1914)c
 by fumigation, **XI**, 527, 1331-1334; **XIII**, 558-560, (562), 1481, 1482; **XIV**, 312, (858), 1840, 1843, 1844; **XV**, 262, (270), (1232), 1895

Citrus scale control (continued)—

- by sprays, oil, DDT and other, **XI**, 159, 1335; **XII**, 566, 1006; **XIII**, 556, 557, 561, 1479-1481; **XIV**, 313, 854, 855, 1174, 1840, 1841; **XV**, 261, 942, 1211-1213, (1232), 1895
 various methods, **XII**, 219, 220; **XV**, 1896
 Florida red (*Chrysomphalus aonidum*), **XV**, 942, 1214, (1232)
 incidence, factors affecting, **XI**, (872)
 purple (*Lepidosaphes beckii*), Mg deficiency affects, **XIII**, (562)
 red (*Aonidiella aurantii*), **XI**, 527, 1332; **XIII**, (260), 558, (562), 1478-1481; **XIV**, 312, 313, 855, (858), 1174, 1452, 1655, 1841-1845; **XV**, 1895, 1896
 white louse (*Protaspis citri*), **XIV**, 1840
 scaly bark, *see* psoriasis
 scion dominance, **XIV**, 1823
 seed storage, **XIII**, 1563
 seedlessness and economics, **XI**, 1305
 seedlings, early flowering, **XI**, 1310, 1311
 snail (*Helix aspersa*), **XIII**, 563, 564
 soil—
 chemical studies, **XI**, (1315)
 management, **XV**, 1879, 1880
 moisture tests, **XII**, 209, 210
 renovation, **XI**, 516
 temperature, **XV**, 778
 sooty blotch (*Gloeodes pomigena*), **XI**, 271, 523-525, (872)
 species, phylogenetic relationship of, **XI**, 1307
 sprayers, boom, **XV**, 260
 sprays, sulphur residues on foliage, **XIV**, 856, 1854
 storage problems, **XI**, 1458; **XII**, 1146, 1147; **XIV**, 1382, 1383; **XV**, 875, 2005
 sulphur deposits on foliage and injury, **XIII**, 1483; **XIV**, 856
 temperatures of air and soil in California, **XV**, 778
 thrips, various, **XI**, 528, 868, 869, 1329; **XII**, 565, (1480); **XIII**, 259, 555, 557, 976; **XIV**, 852, (858), 1326, 1848; **XV**, 794, 1055, 1215
 topworking, **XII**, 997
 transpiration rate compared with that of peach, **XII**, 1243
 "tristeza" disease, *see also* decline, **XIV**, 1836
 twig blight (*Sclerotinia sclerotiorum*), **XV**, 1892
 varieties—
 for California, **XV**, 1195
 of the Far East, **XIV**, 1314, 1315
 in New Zealand, **XII**, 549
 in the Punjab, **XV**, 1867
 triploid, **XIV**, (858)
 for Tucumán, **XII**, 721
 virus diseases, **XI**, 521, 864, (872), (1320); **XIV**, 845, 1322, 1323; **XV**, 792
 vitamin P in, **XIV**, 1968; **XV**, 332
 waste, *see* by-products
 waxing to preserve fruit, **XII**, 1105, 1147
 weed control, **XIV**, 1850, 1851; **XV**, 1879, 1880
 weevil borer (*Cratosomus punctulatus*), **XII**, 218
 windbreaks, **XII**, 213, 560; **XV**, 1199
 wither tip (*Colletotrichum gloeosporioides*), **XI**, 156; **XII**, 1004

SUBJECT INDEX

- Citrus* (continued)—
 wood—
 chemical constituents of, XIII, (260)
 lignin content, XI, 1308
 wraps, XI, 269, 272; XIII, 1046
Cladophora spp. a source of paper, XV, 146
Cladosporium—
 cucumerinum, XIII, 520
 fulvum, XII, 169, 170, 1301, 1575; XIII, 212,
 (219), 1440; XIV, 2025; XV, 735, 736, 944,
 1175
 herbarum, XIII, 662
 Clamps—
 to adjust branch growth, XIII, 1187
 for vegetable storage, XIV, 914, 916
 Classification—
 of bacterial plant pathogens, XIV, (635),
 1595
 botanical, chromosome numbers important
 in, XV, 2065
 of cultivated plants, XIV, (1030)
Clasterosporium carpophilum, XIII, 426
 Clementine orange, *see* Orange, Clementine
Clibadium surinamense as ground cover for rubber,
 XI, 1409
 Climate—
 chambers for production of artificial, XIV,
 1118
 and deciduous fruit growing, XII, 59-61;
 XIII, 34; XIV, 1033; XV, 37, 73
 and growth rings, XII, 353
 influence on starch and sugars in plants, XV,
 151
 irrigation affects, XIII, 705
 and man, U.S. Dep. Agric. yearbook 1941,
 XIII, 338
 soil, in orchard at Stellenbosch, XIV, (1083)
 and sugar cane and beet, XIII, (131)
 and tobacco, XIII, (131)
 and vegetable crops in U.S.A., XIII, 130
 and vine yields, XV, 79
Clinodiplosis midge in stored seed, XIV, 1954
Clitandra orientalis a rubber plant, XII, 1068;
 XIII, 1025
Clitocybe root rot—
 of banana, XIII, (294)
 of woody plants, XV, (599)
Clitoria racemosa as shade tree for cacao, XV,
 1257
 Cloche cultivation, XI, 450, 451; XII, 317, 900,
 901; XIV, 183
Clostridium botulinum in canned vegetables, XIV,
 1428
 Clove—
 field trials, criterion of results, XIII, 602
 grafting, XII, 1579
 growing in India, XI, 569
 manuring, XIV, 1454, 2028
 origin and distribution, XI, 1351
 shade for, XII, 1163; XIV, 1454
 solubility studies on whole, XIV, (1431)
 "sudden death", XI, 934; XIV, 425
 Clubroot (*Plasmodiophora brassicae*), XI, 109,
 1245; XII, 165; XIII, 460, 461, 860, 1408;
 XIV, 235, 758, 1257, 1728; XV, 937, 1101
Clysia ambiguella, *see* Vine moths
Cnidocolus margravii source of drying oil, XIII,
 1017
 Coal—
 from material of recent origin, XIII, (1620)
 tips, inducement of vegetation on, XV, 33
 Cobalt salts as indicators of humidity, XV, (972)
 Coca (*Erythroxylon coca*) cultivation, XI, 533;
 XIII, 1535
 Cocaine, *see* Coca
 Coccids—
 on coconuts, XI, 594
 on roots in Egypt, XII, (235)
Coccinella septempunctata to control woolly aphid,
 XV, 1601
Coccinia cordifolia, XIV, 901
Coccomyces hiemalis, *see* Cherry leaf spot
Coccothypes dactyliperda, XIV, 864
Coccus viridis, XIII, 1012
 Cochylis, *see* Vine moths
 Cocklebur, effect of light and temperature on,
 XI, (380)
 Cocoa, *see also* Cacao—Research Conference,
 London, 1945, XV, 1259-1285
 Coconut—
 beetle (*Oryctes rhinoceros*), XI, 954
 bronze leaf disease, XV, 1294, 1353
 caterpillar (*Nephantis serinopa*), XI, 953;
 XII, (653); XIV, 955
 Coccidae on, XI, 594
 desiccated, packing and keeping, XII, 309
 diseases, XI, 323; XV, 1294
 dwarf, XIII, 1093; XIV, 1437
 Experiment Station, Port Swettenham, XI,
 592
 food value, XI, 235
 fruit, changes during growth, XIII, 616
 fruit development and copra content, XI,
 232
 green manuring, XIV, 1437
 growing—
 in Bahia, XII, 1087
 in Brazil, XV, 857
 in Gold Coast, XV, 377, 378
 in Jamaica, XI, (248), 1031
 in Trinidad, XII, 262
 in Zanzibar, XIV, 1454, 2028
 growth abnormalities, XII, 1516
 husk ash as fertilizer, XI, 1431; XII, 257, 263,
 651; XIII, 1549
 industry in Ceylon, XIII, 1619
 investigations in Malaya, XI, 592
 knifcut disease, XI, 952
 leaf hispa (*Brontispa froggatti*), XI, 233
 leaf miner (*Promecotheca papuana*), XI, 234
 manganese deficiencies, XV, 858
 manuring, XI, 1023, 1427; XII, 264, 265;
 XIII, 1093; XIV, 955, 1437
 Melittomma insulare a beetle pest of, XI, 595
 nitrication periodicity of, XI, 1428
 nutfall, premature, due to *Amblypelta coco-*
 phaga and other causes, XI, 593, 1429
 oil—
 extraction, XI, 1486; XII, 308
 Lava process for production of, XII, (691)
 origin and distribution, XI, 1351
 pearls, XI, 596
 pests, XI, 236, 1430
 picking or allowing to fall, XII, 652
 poonac as manure, XI, 230
 Res. Scheme Ceylon, A.R. 1940-1942, XI,
 1023; XIII, 1093; XIV, 1437
 rhinoceros beetle (*Oryctes* spp.), XI, 954
 seed selection, XI, 231
 shell utilization, XII, 310; XIV, (361), (2003)
 stem bleeding, physiological, XIII, 1550
 Cocos—
 coronata in Bahia, XII, 1085
 palms of Brazil, XII, 650, 1084, 1085

SUBJECT INDEX

- Cocoyam root rot, **XI**, 190
- Codling moth (*Cydia (Carpocapsa) pomonella*)—biology, **XII**, 876; **XIII**, 1298, 1637; **XIV**, (1184), 1451, (1662); **XV**, 575
- cocoons and cocooning, **XI**, 1192; **XV**, (1071)
- control—
- biological, and parasites, **XIII**, 1633; **XIV**, 954, 1158, (1662), 2025; **XV**, 372, 574, 925, 1624
 - baits used in, **XIV**, 143, (1184)
 - banding, **XII**, 456; **XIV**, 601
 - and brown rot control combined, **XV**, 1619
 - cultural methods, **XI**, 769; **XII**, 457; **XIV**, 602
 - by insecticides, **XI**, 433-436, 770, 1190-1192; **XII**, 128, (462), 875-877, 1323, 1324, 1326, 1327, (1328); **XIII**, 434, 435, (451), 828-830, 1296-1302; **XIV**, 143, 144, 604, 963, 1155, 1156, (1184), 1441, 1625, 1626, 1628; **XV**, 576, 1045-1050, 1055, 1615, 1618, 1619, 1621, 1622
 - light traps, **XIV**, 1627
 - in S. Africa, **XV**, (128)
 - scab control affected by, **XII**, 1325
 - subsidiary measures, **XI**, 771; **XV**, 1620
 - various methods, **XIV**, 1440, 1451; **XV**, (128), 1617
 - in Denmark, **XV**, 575
 - in England, **XIV**, 1610
 - false (*Argyroplote leucotreta*), **XIII**, (982); **XIV**, 631
 - nutrition affects development, **XIII**, 113
 - oviposition in pear orchard, **XIV**, (1184)
 - resistant strains, **XV**, (1658)m
 - in Rio Negro, Argentina, **XV**, 1617
- Coefficient of contingency for horticultural research, **XIV**, (19)
- Coffea arabica*—
- var. Bourbon, **XIII**, 595
 - cultivation in Belgian Congo, **XIV**, 1345, **XV**, 281
 - cuttings, propagation by, **XI**, 200; **XV**, 282, 834
 - embryo and endosperm development, **XII**, (627)
 - genetics, **XI**, (248)
 - improvement in São Paulo, **XIII**, 595
 - nutrition of, **XI**, 201
 - root growth, **XII**, 245; **XIII**, 1013
 - selection in Belgian Congo, **XV**, 281
 - in Sudan, **XIII**, 276
 - transpiration, **XI**, 560
- Coffea liberica*, manuring and mulching, **XI**, 928
- Coffea robusta*—
- in Java, **XII**, 621
 - manuring and mulching, **XI**, 928
 - pruning, **XII**, 1039; **XV**, 283
 - root systems, **XV**, 280
- Coffee, *see also Coffea*—
- annual report of plant pathologist (Coffee Services, Kenya) 1942, **XIII**, 1519
 - Antestia* damage and control, **XII**, 1507, 1509, 1510; **XIII**, 594, 1519, 1636; **XV**, 286, 839, 840, 1942
 - bean abnormalities, **XI**, (248); **XII**, 1507
 - beetles, longicorn, **XV**, (1298)
 - Board of Kenya, A.R. 1940/41, 1943/44 and 1944/45, **XII**, 327; **XIV**, 2023; **XV**, 1248
 - borer beetle (*Stephanoderes hampei*), **XIV**, 344; **XV**, 837
 - breeding at Balehonnur, **XI**, 926
 - Cantagalo disease possibly due to *Erysiphe* sp., **XV**, 1940
 - cherry drop affected by rainfall, **XV**, 836
 - cherry husk not a cure for malaria, **XIII**, 1521
 - classification of early crop, **XIII**, 1011
 - climates and acclimatization, **XV**, (865)
 - Colletotrichum coffeanum* on, **XIV**, 2017
 - Costa Rica's most important product, **XII**, 589
 - cuttings, **XI**, 200, 1048, 1520; **XII**, 1159; **XIII**, 1635; **XV**, 282, 386, 834, 1235
 - diseases, **XI**, 1520
 - drought causes leaf scorch in, **XV**, 1939
 - economics, a world survey, **XV**, 1938
 - eelworm (*Tylenchus coffeae*), **XII**, 625
 - Elgon dieback resistance in, **XV**, 830, 1253
 - flowering investigations, **XII**, 1038
 - grading, **XV**, 832
 - grafting, **XI**, 1380; **XV**, 940
 - green manuring, **XV**, 1250
 - growing—
 - in Belgian Congo, **XIV**, 1345
 - in Burma, marketing system, **XI**, 924
 - in East and Central Africa, **XI**, 198
 - in Ethiopia, **XIV**, 879
 - in Fernando Po, **XV**, 271
 - in Haiti, **XIII**, 277
 - in India, Chikmagalur, Mysore, **XIII**, 1515
 - in Indonesia, cultural problems, **XI**, 925
 - in Kenya at lower altitudes, **XII**, 622; **XV**, 831
 - in Kenya west of the Rift, **XIII**, 594; **XV**, 831
 - in Puerto Rico, **XI**, 206; **XIV**, 423
 - in São Paulo, Brazil, **XIII**, 1517
 - in S. India, **XI**, 199; **XII**, 1506
 - in Venezuela, **XIII**, 1516 - harvesting and subsequent treatment, **XV**, 1249
 - leaf—
 - disease control by bordeaux, **XI**, 1382
 - fall, bordeaux spray for, **XII**, 1508
 - scorch due to drought, **XV**, 1939
 - light intensity affects, **XV**, 833
 - liquor affected by dryness, **XV**, 1334 - Lygus* control, **XV**, 839
 - manuring, **XI**, 928, 1028, 1381, 1384; **XII**, 623, (627); **XV**, 830, 1250
 - marketing control in Kenya, **XIV**, 881, 1892
 - mealybug (*Pseudococcus kenyae*), **XII**, 1511; **XIII**, 1014
 - mulching, **XII**, 1582; **XIII**, 1635; **XV**, 830
 - multiple stem, converting to, **XIII**, 1518, 1635
 - nursery practice in Guatemala, **XIV**, 1894
 - nutrients removed from, and restored to, soil by, **XII**, (627)
 - pests—
 - chemical control, **XV**, 1943
 - and cultural problems related thereto, **XI**, 204
 - and diseases, economic effects, **XIV**, 1918
 - physiology of, **XIV**, 1893
 - problems in Kenya, **XIV**, 340; **XV**, 830
 - propagation, *see* cuttings, grafting and nursery
 - pruning, **XII**, 1039; **XIII**, 1518, 1635, 1636; **XV**, 283, 386, 388, 1251
 - pulpers, maintenance, **XIII**, 1520
 - replacement in the plantation, **XV**, 285

SUBJECT INDEX

Coffee (*continued*)—

- research—
 - in East Java, **XI**, 1383
 - in Hawaii, **XIII**, 1632
 - in Puerto Rico, **XI**, 1520
 - at Scott Laboratories, Kenya, **XIII**, 1519
 - Station for Kenya, preparations for, **XV**, 1248
 - Station, Lyamungu, Moshi, Tanganyika, A.R. 1938, 1940, 1939, 1941-1943, **XI**, 1048, 1522; **XII**, 1582; **XIII**, 1635; **XV**, 388
 - Station, Lyamungu, work 1934-43, **XV**, 1936
 - in Uganda, **XIII**, 1636
 - a root disease, **XI**, 562
 - rootstocks, **XII**, 1582; **XV**, 940
 - scales, relation of ants to, **XIII**, 1012
 - seed, polyembryonic and embryo-less, **XV**, 835
 - selection, **XII**, 620; **XIII**, 593, 594; **XV**, 281
 - shade trees and nutrition, **XI**, 1384; **XII**, 1582; **XIII**, 1636; **XIV**, 880, 1895
 - shade trees (*Leucaena* spp.) as source of wood, **XI**, 202
 - shading in Latin America, **XIII**, 596; **XIV**, 1895; **XV**, 284, 1252
 - soil management, **XII**, (624)
 - spacing, **XI**, 927
 - spraying in Southern India, **XIV**, 882
 - stem borer (*Xylotrechus quadripes*), **XI**, 205; **XII**, 626; **XIV**, 1346
 - strip weeding to prevent erosion, **XII**, 601
 - thrips, *Diarthrothrips coffeae*, **XV**, 838, 1254, 1941
 - topworking, **XI**, 561
 - transplanting, **XV**, 1937
 - tree recording, **XIII**, 593
 - of Uganda, wild, **XIV**, 878
- Coir industry in Ceylon, **XIII**, 1619
- Coix lachryma-jobi*, **XI**, (965)
- Colamine as growth substance, **XIII**, 364
- Colchicine—
- cell division influenced by, **XIII**, (33)
 - controls crown gall, **XV**, 970
 - effects compared with those of growth substances, **XV**, 427
 - effect on liverwort, *Pallavicinia lyellii*, **XI**, 660
 - as growth stimulator, **XV**, 1403
 - and heteroauxin relations, **XI**, (1067)
 - induces—
 - amphidiploidy in basil, **XII**, 757, 758
 - polyploidy—
 - in apples and pears, **XIV**, 960
 - in cassava, **XII**, (273)
 - in cranberry, **XI**, (1137); **XV**, (526)
 - in cucumber, **XIV**, (1298)
 - in Java jute, **XI**, (1370)
 - in papaw, **XII**, 233
 - in *Papaver somniferum*, **XII**, (1412)
 - in plants, **XIII**, 32, (33), 1102; **XIV**, 960
 - tetraploidy—
 - in *Cosmos*, **XI**, (1067)
 - in economic plants, **XI**, (681)
 - in kok saghyz, **XII**, 1414
 - in pears, **XII**, 794
 - in *Ricinus communis*, **XII**, (1412)
 - in tomato, **XIII**, 201
- for papaw improvement, **XII**, 233
- and pollen growth, **XII**, 346; **XV**, (34)
- stimulates seed germination in petunia, **XII**, 1457

Colchicine (*continued*)—

- treatment and technique, **XIII**, 32, 371, 1102; **XIV**, 960; **XV**, 428, 971
- Colchicum umbrosum*, colchicine from, **XII**, 758
- Cold, *see also* Frost—
- effect on citrus pests, **XI**, 870
 - effect on deciduous fruit trees, **XIV**, 64
 - 65
 - injury, *see* Frost and particular plants
 - resistance—
 - in evergreens affected by defoliation, **XIV**, 296
 - manuring affects, **XV**, 409
- Coleophora*—
- malivorella*, **XII**, 454; **XIV**, 1160
 - pests of fruit trees, **XI**, 432
- Coleoptera*, parasites of, **XIV**, (1185)
- Coleus*—
- growth substances and, **XI**, (347), 1059; **XIV**, (14)
 - mosaic of, **XV**, 1192
- Collards, insecticides for use on, **XIII**, 1350
- Colletotrichum*—
- atramentarium*, **XIII**, 1436
 - capsici*, **XV**, 648
 - coffeanum*, **XIV**, 2017
 - gloeosporioides*—
 - on avocado, **XI**, 886
 - on citrus, **XI**, 156; **XII**, 1004; **XV**, 1206
 - latent infections, **XI**, (965)
 - on mango, **XI**, 949, 950
 - lagenarium*, **XIII**, 520
 - lini*, **XIII**, 881; **XV**, (598)
 - phomoides*, **XV**, 739
 - pisi*, **XIV**, 288; **XV**, (598)
- Colloids, influence on soil and plant, **XIV**, (1030)
- Colocasia esculenta*, *see also* Taro—
- cultivation, **XI**, 189
 - diseases, **XII**, 244
- Colombia—
- agriculture in, **XIV**, 327
 - plantation rubber growing in (Hevea), **XV**, 1291
 - vegetation and plant resources, **XII**, 1016
- Colonies, economic plants of the, **XIV**, (365)
- Colorado agric. Exp. Stat. A.R. 1941/42 and 1942/43, **XV**, 374, 375
- Colorado beetle (*Leptinotarsa decemlineata*), **XII**, 1388; **XIII**, 215; **XV**, 1707
- Colour—
- in citrus fruit, nature of, **XI**, 853
 - in fruit affected by growth substances or other chemicals, **XII**, 754, 809; **XIII**, 346; **XIV**, 521
 - in hydrangeas, factors affecting, **XIII**, 234; **XIV**, 295
 - retention in fruit products, **XI**, 636
- Colouring—
- artificial, of fruit, **XIV**, 1387
 - fruit after harvest, **XI**, (737)
- Combretum*—
- genus in French West Africa, **XV**, 1240
 - micranthum* cultivation, **XV**, 843
- Comperiella bifasciata*, **XIII**, 557, 978, 1478; **XIV**, 1452
- Composition—
- of peach fruit, variation during development, **XIII**, 390
 - of plants, altitude affects chemical, **XIII**, 360; **XV**, 1392
 - of plants, micro-incineration to determine, **XIII**, (375)

SUBJECT INDEX

- Compost(s)—
 in forestry, use, **XIV**, (458)
 gardening, a manual, **XV**, 917
 investigations at Macaulay Institute, **XIII**, 368; **XIV**, 1443
 the John Innes, **XI**, 654, 1508; **XII**, 350; **XIII**, 665; **XIV**, 960; **XV**, 16, 18, 462, 1089
 making—
 accelerated, **XII**, 818
 from bracken, **XI**, 655
 from cereal and maize stalks, **XIV**, 1522
 changes in organic matter in heaps, **XIII**, 60
 hot fermentation method, **XI**, (248)
 the Indore method, **XIV**, (19)
 in Kenya, **XI**, 177
 kraal, **XII**, 1483
 from leaves, **XV**, 1435
 from Napier grass (*Pennisetum purpureum*), **XIII**, 580
 in Nyasaland, **XI**, 1357
 in South Africa, **XII**, 83; **XIV**, 1523
 with straw, **XIV**, 514, 515
 from sugar cane refuse, **XIII**, 1009
 from town wastes, **XIV**, (1030); **XV**, 138
 the Trengganu plan, **XII**, 1025
 and value of product, **XIV**, 652
 from water hyacinth, **XI**, 907
 in Western Australia, **XII**, (406)
 in market gardening, use of, **XIV**, 651; **XV**, 603
 orchard use of, **XII**, 817
 seed and potting, see Composts, the John Innes
 straw-sludge, **XV**, 1481
 straw *versus*, **XIV**, 76
 tobacco mosaic affected by, **XV**, 935, 1090
 for vegetable and flower growing, **XIII**, 61
 Concentrates, fruit, see Juice concentrates
Conchylis ambiguella, see Vine moths
 Conference—
 Cocoa Research, London, June 1945, **XV**, 1259-1285
 on dehydration in California, in 1945, **XV**, 1325
 Fruit, at Maidstone, Kent, in 1944, **XV**, 438
 on plant protection at Wädenswil, 17th, **XIV**, 116
 Vegetable and Fruit Growers', at Worcester, in 1944, **XV**, 1346
 on vine pests and diseases at Wädenswil, in 1942, **XIV**, 549
 Congrès national pomologique, Paris, 1943, **XV**, 1347
 Conifer needles, vitamin C in, **XIV**, 1401
 Conifers, propagation from cuttings, **XI**, 2, 335, 336, 338, 1060; **XII**, 2, (351), 756
Coniothecium chomatosporum, **XV**, 95
Coniothyrium wernsdorffiae, **XIV**, 136
Conotrachelus nenuphar, see Plum curculio
 Containers, plant, soil moisture in, **XII**, 33
Contarinia—
 humuli, **XI**, 1175
 nasturtii pest of oil plants, **XIV**, 215
 torquens control, **XV**, 944
 Contingency for horticultural research, the coefficient of, **XIV**, (19)
 Contour—
 farming, **XII**, 36, 37
 furrowing, **XI**, 14
 systems for citrus, **XV**, 247
 systems for orchards, **XIV**, 1078
Convolvulus arvensis, **XII**, 469; **XIII**, 692, (836); **XIV**, 180, 609; **XV**, (128), 1102
 Cooking affects nutrient content of vegetables, see Vegetables, cooking
 Cooling loads for fruits and vegetables, **XV**, 315
 Coonoor fruit station, **XI**, 1033; **XIV**, 961; **XV**, 936
 Co-operative marketing of fruit and vegetables, **XIII**, (403)
 Copal, Manila, **XI**, (1506)
 Copper—
 deficiency, **XI**, (380), 885; **XII**, 750, 999; **XIII**, 1494; **XIV**, 556, 782, 1829; **XV**, 1202
 determination—
 in fertilizers, **XII**, 26
 in soils, **XII**, (1195)
 effect on enzyme activity in tomato, **XIV**, 1276
 fertilizer—
 for potato, **XIV**, (193)
 in spray form, **XI**, 863
 fungicidal action, **XII**, (138), (894)
 injury to lemons, **XI**, 1326
 in plants, **XIV**, 1029; **XV**, 405
 in tomato products, **XI**, 1477
 sebacate, seed protectant, **XIII**, 464
 Copra—
 Ceylon estate, **XV**, 2058
 composition, coconut manuring affects, **XII**, 265
 content of coconut, factors affecting, **XI**, 232
 industry in New Guinea, **XII**, 690
 as pig feed, **XI**, (1012)
 preparation and grading in Fiji, **XI**, 1487
Corchorus spp., see Jute
Cordia interrupta, **XIV**, 1444
 Cordon cultivation of fruit trees, **XIII**, 49; **XIV**, (1083), 1479; **XV**, 1000
 Coriander (*Coriandrum sativum*), growing conditions affect content, **XV**, 162
 Cork—
 in apples, **XI**, 255, 1150
 oak in the Americas, possibilities for, **XIII**, 1108
 tree, research in Portugal on, **XII**, 1169
 Corkwood (*Duboisia myoporoides*), **XII**, 1048
 Corky core in apple, **XII**, 434; **XV**, 89
 Corn earworm, see *Heliothis armigera*
 Cornwall C.C. vegetable and other trials, **XIV**, 1192
 Correlation—
 from ranks for horticultural research, **XI**, (1092)
 theory of, **XIV**, 433
 Corticium—
 fulviforme on cover crops, **XII**, 1302
 microsclerotia, **XIV**, (1875); **XV**, (758)
 salmonicolor, **XII**, 562; **XIV**, 1604; **XV**, 95
 solani, **XIV**, 192
 stevensii, **XV**, (599)
Corylus heterophylla and *C. mandshurica* in the Far East of Russia, **XIV**, 111
Corynebacterium—
 michiganense, **XIV**, 785
 sepedonicum, **XV**, 211
Coryneum beijerinckii—
 on apricot, **XII**, 859; **XV**, 565
 control, **XIV**, (547)
 on peach, **XIII**, 108
Cosmopolites sordidus, **XII**, 1147
 Cosmos—
 effects of application of thiamine and other growth substances to, **XII**, 339; **XIII**, (676)
 sulphureus, light affects, **XI**, 358

SUBJECT INDEX

- Costa Rica—
 Centro nac. Agric. A.R. 1939, **XI**, (1054)
 experiment stations in, **XII**, 1497
 Inter-American Institute of Agricultural
 Science in, **XIII**, 268
 plant resources, **XII**, 589
 Costings of vegetable dehydration, **XV**, (911)
Cotinis nitida, **XV**, (758), 1096
Cotinus coggygia, a tannin plant, **XV**, 191
 Cotton—
 grafting, **XIV**, 1332
 growing in Bulgaria, possibilities of, **XIII**,
 (886)
 Cottontail rabbit control, **XII**, 129
 Council for Scientific and Industrial Research
 Australia—
 A.R. 1939/40-1943/44, **XII**, 1146, 1147;
XIII, 1630; **XV**, 369, 1348
 staff and publications in 1942/43, **XV**, 369
 Cover crops, *see also* Manuring, green—
 domestic ryegrass, **XV**, 1484
 for grapefruit, **XII**, 212
 leguminous, **XI**, (965)
 orchard, **XI**, 1051, 1052, 1122; **XII**, 812-814,
 (826); **XIII**, (753); **XIV**, 1517; **XV**, 58,
 385, 487, 1484, 1485
 for peaches, *see* Peach
 permanent grass, **XII**, 814
 for rubber, **XI**, 939, 1409
 and strawberry root rot, **XI**, 1166, 1167
 for tung, **XIII**, 1489
 for vines, **XIII**, 781
 Cowpea (*Vigna* spp.)—
 leaf spot (*Helminthosporium*), **XV**, 1839
 mosaic disease, **XII**, 1094; **XIV**, 869
 nitrogen content, **XI**, 55
 seed production, **XIV**, 1188
 seedlings, vitamin C affects cell size in, **XII**,
 (18)
 spacing, **XIV**, 900
 Cox's Orange Pippin, *see* Apple varieties
 Crabs, ornamental, rootstocks for, **XI**, 1288, 1289
 Cranberry (*Vaccinium* spp.)—
 blossom induction in, **XIV**, (534)
 cultivation—
 methods, **XIV**, (1567)
 weather effects on, **XIV**, 102
 drying, **XIV**, 1418
 false blossom virus in, **XII**, 849; **XIV**, 1127
 flooding, damage incurred during, **XIII**, 1242;
XV, 520
 fruit worm (*Mineola vaccinii*), **XI**, 1194;
XIV, 140
 glades in W. Virginia, **XIII**, (785)
 growth and fruiting, **XIII**, 82
 Laboratory, Washington State, **XV**, 945
 pest control, **XV**, 1055
 polyploidy induced by colchicine in, **XI**,
 (1137)
 sectorial polyploidy and phyllotaxy, **XV**,
 (526)
 storage, **XI**, (984)
 variety, a large berried Russian, **XIV**, 101
Crataegus oxyacantha as rootstock for quince, **XII**,
 1232
Cratosomus punctulatus, **XII**, 218
Crematogaster sp. as cacao pollinator, **XIII**, 281
 Cricket, mormon (*Anabrus simplex*), **XIV**, (161)
Criconema rusticum on vines, **XV**, 944
 Croatia, fruit growing in, **XIV**, 466
Crociodolomia binotalis, **XV**, 1775
Cronartium ribicola, **XIII**, 822; **XV**, 511, 1578
- Crop—
 : growth relations in apples, **XII**, 392
 mineral composition in relation to soil, **XI**,
 686
 production and soil problems in West Africa,
XIV, 1442
 recording, labour economy in, **XIII**, 1204
Crotalaria—
anagyroides—
 indicator plant of rubber root rot, **XIV**,
 1363
 for intercropping with coffee, **XV**, 1250
juncea, *see* Sunnhemp
 Crown gall (*Bacterium* (*Pseudomonas*) *tumefaciens*)—
 apple emanations do not affect, **XIV**, 1132
 auxin relationship, **XII**, 173, 174
 bacteria, polysaccharide production by, **XV**,
 (1071)
 control—
 in almond, **XII**, 117
 on apple rootstocks, **XV**, 1568
 by colchicine and X-rays, **XV**, 970
 cytological investigations, **XII**, (1318)
 effect on growth of excised tissues, **XV**, (598)
 inoculations, **XI**, 1518; **XIII**, (219)
 and its organism, **XIV**, (1184)
 and penicillin, **XV**, 551, 552, 1569
 physiology, **XII**, (462)
 production by bacteria-free tissue, **XII**, (18)
 thiamine in, **XIV**, 1131
 of tomato, **XII**, 173, 174, (1440)
 tumours on periwinkle, *Vinca rosea*, **XIV**,
 576; **XV**, (1659)a
 virulence increased by titanium, **XIV**, (635)
 Crucifers, mustard oils and clubroot in, **XIII**, 1408
 Cryolite, *see also* Sprays, insecticides and Dusts
 Cryolite injuries to seedlings of tobacco, **XIII**,
 1366
Cryptostegia spp. rubber plants, **XIII**, 499, 1542;
XIV, 348-350, (412), 716, 721, 889, 1242,
 (1932); **XV**, 369, (1185), (1298)
Cryptus sexannulatus, **XIV**, 1158; **XV**, 372
 Cuckoo spit insect (*Cercopis sanguinea*), **XI**, 1175
 Cucumber—
 ascorbic acid oxidase from, **XII**, (295)
 beetle, striped (*Diabrotica vittata*), **XII**,
 (468); **XV**, 1797
 classification based on ecological evolution,
XII, 1427
 damping off (*Pythium* sp.), susceptibility to,
XII, 966
 diseases, **XI**, (1278); **XIII**, 520
Fusarium diseases, **XIV**, 1757
 irrigation, **XV**, 1772
 leaf curl virus, **XIII**, (947)
 manuring—
 mineral, **XIV**, 253
 sugar cane press cake for, **XIV**, 257; **XV**,
 862
 mildew resistance in, **XII**, 503
 mineral nutrition, **XIV**, 253
 minor element nutrition, **XI**, 473
 mosaic on beans and peas, **XI**, 807
 parthenocarp in, **XI**, 1032; **XII**, 712; **XIV**,
 255
 photoperiodism and, **XV**, 712
 pollination, **XIII**, 198
 polyploidy induced by colchicine, **XIV**,
 (1298)
 powdery mildew (*Peronosplasmopara cuben-*
sis), **XV**, 1158
 preservation, oil dips for, **XIII**, 309, 310

SUBJECT INDEX

- Cucumber (*continued*)—
 seed—
 drying, XV, 202
 extraction, XIII, 1417; XIV, 256, 1268, 1269
 and shoots, low temperature treatment, XIII, 1414
 sex of flowers depends on moisture conditions, XV, 201
 spacing in Trinidad, XIV, 900
 vernalization, XII, 965
 viruses, XIII, (947); XIV, 254
 water culture of, XV, 1796
- Cucurbita pepo*—
 gaseous exchange in, XII, (1454)
 tension calculated in, XV, 1157
- Cucurbitaceae*—
 cultivation in desert, XIV, 1266
 discussion on gourds, marrows, etc., XIII, 519
 diseases in Ceylon, XIV, 955
 European species, XV, 709
 fruits, features of, XIII, (947); XIV, (1298), 1803; XV, (758)
 growth rate and fruit size in, XV, (431)
 hybrid vigour, XIII, 1416
 Mycosphaerella citrullina on, XV, 1795
 oil plants, XII, 527
 phloem exudate of, XIV, 1755
 seed, harvesting and threshing, XIV, 765
 tendrils, XV, 711
- Cultivation, *see also under particular crops*—
 and manuring of orchards, XI, (737)
 and orchard nutrient elements, XI, 1117, 1119
 ridged, in Tanganyika and Nigeria, XV, 272
- Culture(s)—
 methods, artificial, *see also* Water cultures, XIV, 1011
 solution, nutrient vapour, XV, 4
 sterile, for study of plant metabolism, XV, 1
- Cumbungi (*Typha* spp.), control, XI, 88
- Curculio uniformis*, XV, 1044
- Curcuma* spp., *see* Turmeric
- Currant, *see also* Black and Red currants—
 buffalo (*Ribes aureum*), XIII, 71
 growing (red and black) in Ontario, XIV, 1084
 pests, XII, (867)
- Cuscuta*, *see* Dodder
- Custard apple (*Annona cherimola*)—
 cultivation—
 in Argentina, XIV, 353
 in Brazil, XV, 851
 in N.S.W., XIII, 990
 in Queensland, XIV, 352
 harvesting and packing, XV, 849
 nutritive value, XIV, 1393
 pollination, XII, 574; XIV, 1920
 research in California, XIII, 987
- Cuticle in angiosperms, XIV, (19)
- Cuttings—
 age of, affects aging of meristem, XII, 1199
 apple, *see* Apple
 blueberry, *see* Blueberry
 callusing in, XV, 15
 coffee, *see* Coffee
 effect of angle of cut, XIII, 12
 fruit tree—
 propagation by hard wood, XIII, 1162, 1163
 rooting of, XII, 376, 377; XIII, 730
 growth substance stimulation, *see under* Growth substances
 hardwood, propagation by, XV, 51
- Cuttings (*continued*)—
 leaf—
 of bean, XI, 1267
 of begonia, XIV, (834)
 bud, of *Rubus*, XI, 1133
 influence of size and age on, XV, 461
 lemon, XI, 514
 medium, anthracite ash, XIV, 1302
 of ornamentals, rooting media for, XI, 1290
 pear, *see* Pear
 of *Perilla nankinensis*, XIII, 382
 polarity in, XIV, 1472
 propagation methods, XIV, 967
 root, XII, 377; XIV, 494; XV, 1440
 root types of apples raised from root, XIV, 49
 rooting—
 factors affecting, XII, 745, 1197; XIII, 11, 382; XV, 1441
 without sunlight, XV, 1400
 of soya bean, XIII, 382
 Stewart's work on propagation by, XIV, 452
 tea, *see* Tea
 of tropical plants, methods of root induce-
 ment, XV, 1235
- Cyanamide and urea, condensation products as
 fertilizer, XV, 411
- Cyanogenetic plants, mercuric chloride for preserv-
 ing, XI, (1092)
- Cybocephalus*, a citrus scale predator, XV, (1914)c
- Cyclamen—
 hot water treatment for cyclamen mite on, XIII, 1459
 mite, *see* *Tarsonemus pallidus*
- Cyclic phases, theory of, applied to flax, XIV, 677
- Cydia—
 funebrana (red plum maggot), XIV, 1610
 moesta, *see* Oriental fruit moth
 pomonella, *see* Codling moth
- Cydonia lagenaria*, the Japanese quince, XII, 790
- Cylas formicarius elegantulus*, XIV, 859
- Cylindrocylindium*—
 scoparium, XV, 1743
 and shoot wilt in plums, XI, 1162
 sp. in plum and cherry layers, XIII, 1279; XV, 100
- Cyllene robiniae*, XII, (988)
- Cyperus*—
 esculentus, cultivation and uses, XI, 912
 rotundus eradication, XIII, 582
- Cyphomandra betacea*, XIII, 571
- Cyprus Dir. Agric. A.R. 1939-41, 1943 and 1942, XI, 1025, (1526); XIII, (347); XIV, (1455); XV, (391)
- Cytogenetics of mango and banana, XV, 380
- Cytological technique, XIII, (31)
- Dacus*—
 cucurbitae, XII, 271; XIV, 250
 oleae, *see* Olive fly
- Daffodil fly (*Merodon equestris*), XII, 544; XIII, 1461
- Daghestan, wild fruit trees in Southern, XIII, 722
- Dahlia—
 growth substances and, XI, (347)
 origin of garden, XII, 537
 virus control, XV, 1864
- Daisies, wild, of U.S.S.R. of insecticidal value, XV, 124
- Damping down in the glasshouse, XII, 1358

SUBJECT INDEX

- Damping off—
 in broad leaf seedlings, XV, (1071)
 in celery, XV, 704
 control—
 by sodium cyanide, XV, 1773
 by soil disinfection, XV, 1696
 in cucumber, XII, 966
 in peas, XV, 1182
 sphagnum moss prevents, XII, 534
- Dandelion—
 Russian, *see* Kok saghyz
 as salad crop, XII, 502
 seed storage, XIII, 1562
- Daphne pontica* as oil plant, XV, 268
- Darkness influences nutrient solution effect in
 maize seedlings, XIII, (697)
- Dasyneura* spp., XI, 1175, 1188; XIV, 215, 548
- Datana integerrima*, XI, 1195
- Date, *see* Date palm fruit
- Date palm—
 bearing affected by leaf area, XIII, 568
 boron in, XIV, 1868
 bunch thinning, XII, 1492; XIII, 1496
Ceratostomella radicola on, XIII, (264)
 chlorine accumulation in, XV, 859
 cultivation—
 in Morocco, XIII, 263
 in the Punjab, XI, 237
- Deglet Noor—
 anatomy of fruit, XIII, 999
 grading, XIII, 569
- fruit—
 composition affected by manuring, XII, 1491
 curing, XI, 237
 development influenced by wax emulsion
 sprays, XIV, 1948
 shrivel, XIII, 1496; XIV, 1948
 spoilage due to *Aspergillus niger* and
Alternaria species, XI, 889
 stone beetle (*Coccotrypes dactyliperda*),
 XIV, 864
- garden, temperatures of air and soil in, XII, 577
- industry in U.S.A., XII, (587)
- leaf—
 elongation, XIII, 1495
 removal, preferably in late spring, XII, 230
- Omphalia* root rot, XV, 1909
- parlatoria scale, XII, 231
- Datura*—
ferox in Tucumán, XII, 1583
 riboflavin in isolated roots of, XII, 1435
- stramonium*—
 alkaloid contents, XIV, 1238
 and *D. tatula*, harvesting and drying leaves,
 XIII, 171
 and *D. tatula*, sources of stramonium, *see*
also Stramonium, XI, 936
 grafted with tomato, XIII, (219)
 hyoscyamine synthesis in, XIV, (1298)
- Daubentonia drummondii* a source of mannose,
 XV, 149
- Daucus carota*, *see* Carrot
- Day length affects growth in—
Arachis, XII, 1284; XIV, 1105
 florists' crops, XIV, 1301
 onion, XIV, 737; XV, 195
 plants generally, XI, 21
 potato, XI, 1221
Rudbeckia, XI, (380)
 soybean, XI, (380); XII, 1444
- Day length affects growth in (*continued*)—
 vegetables, XI, 93; XIII, 856
 woody cuttings, XII, 745
 woody plants, XII, 744
- DDT, *see* Sprays
- Deficiency, *for detail see* particular elements and
 plants—
 humus, XII, 19
 mineral, diagnosis of, *see also* Injection,
 XI, 1116; XIII, 799, 800, 1089, (1182),
 1248; XIV, 1111, 1570; XV, 84, 529, 530,
 923, 1544, 1545, 1553, 1683, 1685, 1686,
 2081
 minor element—
 bibliography, XIV, 950
 susceptibility to, varies, XII, (367); XV,
 1687
- in plants—
 agricultural and horticultural crops, XV,
 1683
 apple, XI, 720, 721; XIII, 1248; XV, 86,
 531
 cherry, XIV, 121, 1572; XV, 1544, 1546
 citrus, XII, 558, 999, 1468; XIII, 249, 250;
 XIV, 1575, 1829, 1831; XV, 791, 1202-
 1204
 diagnosis, *see* Deficiency, mineral, diagnosis
 fruit trees generally, XIII, 799, 800; XIV,
 1569; XV, 84, 85, 1545, 1547, 1548
 in greenhouse, XI, 502
 olive, XIV, 1111
 ornamentals, XIV, 1804
 in pea, XIV, 810; XV, 1546
 in peach, XI, 421, 753, 1149; XIII, 1246
 in pecan, XIII, 1249
 in *Pinus*, XV, (599)
 in potato, XIII, 151, 152
 in raspberry, XV, 508
 in strawberry, XIV, 554
 in tea, *see* Tea
 in tobacco, XV, 1685
 in tomato, *see* Tomato
 in vegetables, XIV, 177, 1672, 1673; XV,
 85, 1684
 in vine, XIII, 1225, 1246; XIV, 556; XV,
 88
- symptoms—
 in general, XI, 1148; XII, 318; XIII, 1246,
 1247
 indicator plants to show, XIV, 969
 leaf discoloration, premature, XV, 90
 manual on, XI, 1015
 minor elements, XIII, 1420; XV, 508
 in sand cultures, XIV, 1672
 showing lack of particular elements, viz.—
 boron, XI, 70, 464, 720, 1152, 1243, 1470,
 1512, 1518; XII, 24, 25, 104, 159, 161,
 331, 407, 472, 662, 967, 1266, 1422-
 1424, 1426; XIII, (231), 420, 505, 506,
 667, 887, 1257, 1390; XIV, 121, 122,
 217, 218, 248, 451, 540, 731, 756, 1264,
 1272, 1572, 1675, 1831; XV, 85, 88, 89,
 508, 532, 695, 1019-1021, 1143, 1358,
 1550-1552, 1734
 calcium, XI, 485; XII, 999; XIV, 554,
 674
 copper, XI, (380), 885; XII, 750, 999;
 XIII, 1494; XIV, 556, 782, 1829;
 XV, 1202
 iron, XI, 720; XII, 999; XIII, 1547;
 XIV, 1829; XV, 650, 807, 930, 1118,
 1169, 1202, 1544-1547

SUBJECT INDEX

Deficiency symptoms showing lack of particular elements, viz (*continued*)—
 magnesium, XI, 71, 720, 752, 785, 1314, 1512, 1518; XII, (367), 999, 1468, 1469; XIII, (562), 805, 1092, 1255, 1256; XIV, 554, 561, 562, 954, 1574, 1771, 1863; XV, 86, 533, 1002, 1815, 2075
 manganese, XI, 480, 786, 1150, 1272; XII, 105, 186, 214, 215, 912, 999, 1190; XIII, 16, 803, 1247, 1253, 1254, 1492; XIV, 423, 563, 679; XV, 220, 508, 858, 930, 1202, 1544-1547, 1686, 1688
 molybdenum, XV, 1689
 nitrogen, XI, 720; XII, 999; XIV, 554, 1829
 phosphorus, XI, 720; XII, 999, 1251; XIII, 249, 1225, 1252; XIV, 554, 1746; XV, 375
 potassium, XI, 195, 720, 721, 921; XII, 999, 1250; XIII, 1225, 1493; XIV, 554, 954; XV, 86, 88, 1203
 sulphur, XI, (1092); XIII, 250, 494
 zinc, XI, 421, 753, 882, 948, 1149; XII, 999, 1299, 1468; XIII, 295, 1246, 1247, 1632; XIV, 563, 1575, 1576, 1799; XV, 508, 534, 535, 791, 930, 1202, 1204, 1544, 1548
 soil, XIII, 93
 visual, XV, 1684
 tests by small pot cultures, XIV, 1110
 Deguelin separation process, XIII, (578)
 Dehydrated foods—
 SO₂ determination in, XIV, 1420; XV, (2060)a
 in tropics, XIII, 647
 water determination in, XV, 1324, (1336)
 Dehydrators, observations on, XIV, 1975; XV, 340
 Dehydration, *see also* Drying—
 apparatus, XIV, 382
 cabbage for, XIV, 751
 in Canada, XII, 1120
 conference at University of California, XV, 1325
 enzyme inactivation in, XIV, 1970
 injury to plant material, XI, 364
 microbiological problems, XV, 1325
 powdered vegetables, XIII, 1065
 principles of, XIII, 1592, 1593
 prospects, post-war, XIV, 1416
 and vitamin content, XIII, 645, 646, 1582; XIV, 1406; XV, 1327
 Dehydroascorbic acid—
 determination, XIV, (2003)
 reduction of, XIV, 1972
 Deli Tobacco Exp. Stat., Medan—
 A.R. 1939, XI, (650)
 work of, XIII, 588
Delia antiqua, *see* Onion fly
Delphinium sp.—
 ajacis, light affects, XI, 358
 brownii as source of insecticide, XI, 1200
 diseases, XIII, (246), 949, 950
 manuring, XII, (548)
 susceptibility to powdery mildew (*Erysiphe polygoni*), XII, (548)
 Dendrometer for measuring rubber trees, XI, 1404
 Dermoptera, parasites of, XIV, (1185)
 Derris—
 agronomy, a review, XV, 1063
 cultivation—
 in Guatemala, XII, 1029
 in Venezuela, XIII, 577

Derris (*continued*)—
 diluents for pure ground root of, XIII, 1348
 dusts—
 stability in, XV, (1071)
 varying effectiveness of, XIV, (1662)
 effect on man, XI, 179
elliptica, root examination of, XIII, 1319, 1320
 evaluation, XI, (248); XII, (462); XIV, (635), 1682; XV, 1064
 introduction into Latin America, XV, 817
 leaf spot (*Phyllosticta derridis*), XI, 548
malaccensis, potency of rotenone from, XIV, 1682
 ovicidal properties, XIV, 623
 resins for citrus scale, XIV, 313
 rotenone determination in, XIII, 447, 448, 1319, 1320; XV, (1658)k, a
 smoke for fumigation, XII, 892
 sprays, chronic toxicity of, XII, 1341
 trials at Amani, XII, 320
 vegetative propagation with help of growth substances, XIV, 1466; XV, 818
 Desert—
 cultivation of cucurbits, XIV, 1266
 plants, water balance in, XV, 400
 vegetable and fruit cultivation methods, XIV, 435
 vegetation, XI, 1022
 water availability, XIV, 1119
 Dew—
 persistence of, XIII, 1103
 plant-climatological work on, XIV, (19)
 recording apparatus, XV, 1398
 Dewberry hybrids, citric acid in, XIV, 928
 Dhall production in Fiji, XI, 607
Diabrotica—
 genus in Argentina, XV, 571
 vittata, XII, (468); XV, 1797
 Diagnosis of mineral deficiencies, *see* Deficiencies, mineral
Diaporthe—
 citri, *see* Citrus melanose
 perniciosa, XII, 442
Diarthronomyia spp. chrysanthemum midges, XIII, 948, 1457
Diarthrothrips coffeae, XV, 838, 1254, 1941
Diaspis bromelliae, XIV, 1930
Diatraea saccharalis, XI, 914
 Dichloroethyl ether—
 for weed control, XII, (462)
 for wireworm control, XIV, 671
 Dichlorophenoxy acids, *see* Growth substances and Sprays and spraying, herbicides
 Dichloropropylene and dichloropropane for control of nematode, XIV, 360
 Dicotyledons, key to Brazilian, XV, 1916
 Dictionary—
 of biochemistry, XIV, 2009
 French and English, science, XI, 645
 of the fungi, XIII, 1621
 German-English, science, XI, 317
 Russian-English, XII, 1144
 of science and technology in English, French, German and Spanish, XIV, 1432
Didymella—
 applanata on raspberry, XI, 759
 lycopersici, *see* Tomato stem rot
 Diet, tropical, in Hawaii, XIV, (1370)
 Dietetics, *see also* Nutrition, etc.
 Dietetics—
 food composition tables, XIV, 1957
 in Hawaii, XIII, 269

SUBJECT INDEX

Dietetics (*continued*)—

- home practice and nutritive values, **XIV**, 1974
- value of fruits, storage affects, **XII**, 290
- vitamin C, *see* Vitamin C

Digitalis purpurea—

- cultivation in New Hampshire, **XIII**, 172
- flowering influenced by temperature and light, **XI**, (1300)

Dill, artificial light affects, **XI**, 1215Dinitro-ortho-cresol as weed killer, **XV**, 1104, 1105, 1765*Diospyros*—

- kaki*, *see* Kaki
- virginiana*, vitamin C in leaves and fruit, **XIII**, 639

Diphenyl to control citrus fruit rots, **XV**, 875*Diplocarpon rosae*, **XIV**, (834); **XV**, 766, 1858*Diplodia*—

- cajal*, **XIII**, 866
- in citrus, **XII**, 1527; **XV**, 793, 874, 1206, 1207
- natalensis*, **XII**, 1471; **XIII**, 552
- sp. causing heart rot of apple tree, **XII**, (1318)

Dipping fruit, *see* Storage, dips*Dipsacus fullonum* in Punjab, **XIV**, 332Diptera, parasites of, **XIV**, (1185)Diseases, *see also under plant and specific disease*—

- in Argentina, **XIII**, (1238)
- bacterial pathogens, classification, **XIV**, (635), 1595
- British, list of common plant, **XV**, 364
- in Ceylon, environment and, **XI**, (965)
- chemotherapy for, **XIII**, 801, 802
- citrus, a colour manual, **XII**, 1143
- coal fumes cause, in mango, **XIV**, 895
- control, prophylactic measures for, **XII**, 459
- of crops—
 - in Africa, **XIV**, (1370)
 - in Canada, check list, **XIII**, 1627
 - in England and Wales 1933-42, **XIV**, 1106
 - at the I.C.T.A. Trinidad, **XIII**, 1005
 - in São Paulo, Brazil, **XIII**, 1006
- of fruit—
 - in Armenian S.S.R., **XV**, 528
 - in Kansas, control, **XII**, (462)
 - in Kent, **XIII**, 1271
 - in Kentucky, control, **XII**, (462)
 - in Kumaun, **XV**, 95
 - manual in German, **XIII**, 794
 - manual in Swedish, **XIII**, 419
 - in Quebec, non-parasitic, **XIV**, 1579
 - in S. Africa, fungus, **XV**, (128)

of fruit—

- in Armenian S.S.R., **XV**, 528
- in Kansas, control, **XII**, (462)
- in Kent, **XIII**, 1271
- in Kentucky, control, **XII**, (462)
- in Kumaun, **XV**, 95
- manual in German, **XIII**, 794
- manual in Swedish, **XIII**, 419
- in Quebec, non-parasitic, **XIV**, 1579
- in S. Africa, fungus, **XV**, (128)

fungus—

- control, **XIV**, 1134
- immunity to, **XIII**, 583

of gardenias, **XIV**, (1816)

horticultural—

- recent research, **XIV**, 548
- seedborne, **XIII**, 425
- in Jamaica, **XIII**, 581
- in Malaya, **XI**, 178; **XII**, 228
- manuals, **XIII**, 419, 657, 794; **XIV**, 1107; **XV**, 362, 1566

of medicinal plants, **XIV**, (290)

- in the Murray Irrigation Areas, **XIV**, 552
- nature and prevention, a manual, **XV**, 362
- in N. S. Wales, **XIII**, 792

nutrition—

- affects, in tomato, **XII**, 974, 977; **XV**, 728, 729
- of host plant affects, **XIV**, 1577; **XV**, 1774
- of ornamentals, **XIV**, 413
- parasitic, lithium influences, **XI**, 1075

Diseases (*continued*)—

and pests—

- gardener's handbook, **XIV**, 1109
- manual, **XIV**, 1107
- in Pernambuco, **XV**, 1922
- in Victoria, Aust., **XIII**, 791
- physiological, *see also particular phenomena*—
 - of apricot, **XIV**, 1568
 - of fruit in Quebec, **XIV**, 1579
 - of vines, **XIV**, 557
- Portuguese problems of, **XIII**, 1237
- resistance—
 - in plants, **XII**, 106, 1301; **XIII**, 795, 796; **XV**, 527
 - in vegetables, nature of, **XI**, 1212
- in root crops, **XIII**, 862
- root, rejuvenating trees damaged by, **XIII**, 117
- seed borne, **XIII**, 425; **XV**, 610
- of shrubs and small trees, **XIII**, 790
- of small fruits, **XIII**, 116
- in S. Rhodesia, **XIII**, 1499
- in Sweden 1933-37, **XI**, 745
- in Tanganyika, **XIV**, 1884
- in Texas, **XI**, 746
- in Uganda, **XV**, 816
- in U.S.A., recent developments, **XII**, 417
- of vegetables, **XI**, 95, 1210, 1211; **XII**, 467; **XIII**, 657; **XV**, 609
- vine, conference at Wädenswil, **XIV**, 549
- weather and plant, **XIV**, 1283; **XV**, 537

Dishrag gourd, *see* *Luffa aegyptiaca*Ditcher, a new, **XI**, 355*Ditylenchus dipsaci*, **XII**, 958; **XIII**, 242, (512); **XV**, 603Divi-divi (*Caesalpinia coriaria*) a source of tanning material, **XII**, 1016; **XIII**, 1531

Dodder—

- on flax, **XIV**, (1803)
- latent virus and its effect on sugar beet, **XIV**, 1213
- for virus transmission studies, **XI**, 1213; **XII**, 849; **XIV**, 1128; **XV**, 548

Dolichos—

- biflorus* for green manuring, **XII**, 1026

labilab—

- cultivation, **XII**, 657
- scab (*Elsinoe dolichi*), **XV**, 1838

Dominica agric. Dep. A.R. 1941-1943, **XII**, (1164); **XIII**, (1638); **XV**, (391)Dominican Republic, standardization of fruit and vegetables, **XIII**, 1206Dominions, agriculture in British, **XII**, 1166

Dormancy—

breaking—

- in deciduous fruit trees, **XIII**, 1186
- with fungus extracts, **XII**, 349
- by injury, **XIV**, 456
- movement along branches, **XIII**, 356
- in pecan, **XII**, 90; **XIII**, 1232
- by spraying, **XII**, 73, 90; **XIV**, 1034; **XV**, 492
- yeast extracts for, **XI**, 344; **XII**, 6
- changes in composition during, **XI**, 676
- in potato tubers, **XI**, 1217; **XII**, 1374, 1579; **XIII**, 149, 468, 469, 1353
- prolongation by growth substance, **XII**, 1012; **XIII**, 811; **XV**, 805
- seed, importance of oxygen in, **XV**, 1384

Dothidella ulai, **XIII**, 290; **XIV**, 1912Double working for frost protection in apples, *see* Apple, double working

SUBJECT INDEX

- Double working pears, *see* Pears
- Douglas fir, ascorbic acid content of needles, **XV**, (431)
- Dowfume, fumigation with, **XIV**, 1810
- Drainage—
manual on field, **XII**, 1565
mole, **XIII**, (1138), (1206)
orchard, **XIV**, 1532
of vine soils in Murray Valley, **XIII**, 83, 84
- Dried—
food, *see* Dehydrated foods
fruit—
fumigation, **XV**, 344
industry in Argentina, **XIII**, 769; **IV**, 930
non-enzymatic darkening in, **XII**, 296
nutritive value, **XIII**, 1053
peroxidase activity in, **XV**, (2059)n
pests, **XII**, 1538; **XIII**, 430, 1057; **XIV**, 383, 930, 932
reprocessing, **XV**, 903
shipping to tropics, **XIII**, 1058
syrup treated, **XV**, 1326
uses for, **XV**, 2035
products, nutritive value, **XII**, 1121
vegetables, *see* Vegetables, dried and drying
- Drought—
injury to apples, **XIV**, 1586
and plant pigments, **XII**, 1186
resistance—
agricultural plants, **XII**, 464
photoperiodism and, **XIV**, 1120
in tea, anatomical determination, **XI**, 917
- Drugs, *see* Herbs and Medicinal plants
- Dry—
districts, roots and nutrient availability in, **XII**, (367)
farming in Middle East, **XV**, 938
- Drying, *see also* Dehydration—
apples, *see* Apple
apricot, *see* Apricot
blueberry, **XIII**, (1067)
cabbage, *see* Cabbage, dehydration
carrot, *see also* under Carrot, **XIV**, 1405, 1978, 1979; **XV**, 342, 2032
cherries, **XIII**, 1060
citrus for marmalade, **XII**, 1125; **XIV**, 1419
cranberries, **XIV**, 1418
foods—
at home, **XIII**, 1600-1602; **XIV**, 384, 385; **XV**, (2059)x
recent progress in, **XIV**, 929
in wartime, **XIII**, 312, 1051
fruit, *see also* particular fruits—
colour retention and SO_2 , **XII**, 1126, 1537
kilns for, **XV**, (2011)c, 2034
various aspects, **XI**, 632, 1472, 1473, 1479-1481; **XII**, 681, 682, 1120-1122, 1126, 1537, 1538; **XIII**, 646, 648, 1050-1063, (1067), 1593, 1596, 1601, 1602; **XIV**, 381, 383, 384, 386, 929, 930, 932, (945), 1417, 1431, 2019; **XV**, 334, 335, 337, 338, 1327, 1362
in vegetable dehydrators, **XV**, 1325
grapes, *see* Vine, grape drying
guavas, **XIII**, 1062
medicinal plants, **XII**, 686
municipal, of fruit and vegetables, **XIII**, 648
nectarines in New Zealand, **XV**, (2075)
olives, **XIII**, (1067)
peaches, *see* Peach drying
- Drying (*continued*)—
pears—
in New Zealand, **XV**, 2075
waste products for pigs, **XII**, 1557
pineapple, **XII**, 715; **XV**, 901
plums, **XIII**, 1050; **XIV**, (1431)
potatoes, **XIII**, (1603); **XIV**, 933, (945)
prunes, **XIII**, 1598; **XIV**, 1976
pumpkin, **XV**, 1328
spinach, **XIV**, 936
in the sun—
fruit, **XIV**, 386
vegetable, **XIII**, 649
tomato, **XIV**, 381; **XV**, 343
vegetables, **XI**, 1480, 1482, 1483; **XII**, 297, 681, 682, 684, 685, 1120-1122, 1130, 1540, 1541; **XIII**, 646, 648, 649, 1052, 1053, 1056, 1064-1066, 1592-1595, 1599-1602, 1630, 1633; **XIV**, 380, 384, (387), 929, (945), 1406, 1421, 1977, 2019; **XV**, 335-337, 383, 1327, 1362, (2059)x, 2075, 2078
- Drymaria* weed of tea, **XIV**, 1891
- Duboisia*—
hopwoodii as insecticidal plant, **XIV**, 1659
myoporoides, source of hyoscyne, **XII**, 1048
- Duff briquette fertilizers, **XIII**, 63
- Dung, machinery for handling, **XV**, 382
- Dusts—
cryolite, **XIV**, 791
insecticidal, electrostatic charge effects from, **XV**, (1071)
a new adherent, **XV**, (598)
- Dusting—
apparatus, **XIV**, 151; **XV**, 1067
importance of time of, **XV**, 1637
improved blower for, **XIV**, 1347
- Dutch East Indies—
Faculty of Agricultural Science in, **XII**, 236
fertilizer needs, **XV**, 812
research on subsidiary crop plants, **XI**, 1352
- Dutch Windward Islands, agriculture in, **XI**, 1354
- Dwarf fruit trees, *see also* under particular species, **XIII**, 734, 735
- Dyslobus tanneri*, **XI**, (1187)
- Dynamic approach to taxonomic botany, **XIII**, 1127
- Dye plants—
of Dutch East Indies, research on, **XI**, 1352
in East Africa, **XI**, 1397
Solanum nodiflorum or managu, **XV**, 169
- Earwig, European (*Forficula auricularia*), **XII**, 122
- East Africa—
food plants, origin of some, **XV**, 1915
native food crop improvement, **XIII**, 573
- East African Agricultural Research Institute, *see* Amani
- East Malling—
methods of propagation, **XIV**, 967
Res. Stat. A.R. 1941-1943, **XII**, 1576; **XIII**, 1631; **XIV**, 2020
rootstocks, *see* Apple rootstocks, Malling
- East and Mid Java Research Station activities, **XI**, 1383
- Easter lily, *see* Lily, Easter
- Ecological plant geography, **XIV**, 431
- Ecology, affected by climate in La Plata, **XIV**, (1476)
- Economic plants—
of Central Europe, **XIII**, 903
of colonies, **XIV**, (365)
- Economics, agricultural, in Switzerland, **XII**, 729

SUBJECT INDEX

- Ecuador—
 agriculture in, **XIII**, (1553)
 natural flora, **XII**, 590
- Edinburgh, East of Scotland Coll. Agric. A.R.
 1939/40 and 1940/41, **XI**, 1026; **XII**, (1584)
- Education—
 agricultural—
 in Victoria, Aust., **XIV**, 972
 of Fijians, **XI**, 1353
 horticultural, in U.S.A., **XII**, 363
- Eelworm, *see also* Nematode, *Heterodera*, etc.—
 composting as a cure for, **XIV**, 1613
 of horticultural plants in North Africa, **XIII**, 825
 in India, plant, **XV**, 615
 of narcissus (*Anguillulina dipsaci*), **XI**, 834
 root knot, in glasshouses, *H. marioni*, **XII**, (182)
 soil treatments for, **XII**, 181; **XIII**, 1342; **XV**, 614
- Efremov, in memory of, **XIII**, 1145
- Eggplant (*Solanum melongena*)—
 bacterial wilt (*Bacterium solanacearum*), **XV**, 744
 ecotypes, **XII**, 1441
 improved variety in Bihar, **XV**, 217
- Phomopsis*—
 control, **XIV**, (547)
 resistance in, **XII**, 514
Phytophthora rot, **XI**, (131)
 ring rot (*Corynebacterium sepeidonicum*), **XV**, 211
 spacing in Trinidad, **XIV**, 900
 yellows, **XIII**, 1446
- Egypt, standardization of fruit and vegetables in, **XIII**, 1206
- Eichhornia crassipes*, **XI**, 183, 907; **XIII**, 835
- Eidgenössische Versuchsanstalt zu Wädenswil, *see* Wädenswil
- Éire—
 apple soils, **XIII**, 1178
 Minist. Agric. A.R. 1939/40-1943/44, **XI**, (1054); **XII**, (337); **XIII**, (347); **XV**, 946
- Elaeagnus angustifolia*, root nodules on, **XV**, 479
- Elaeis guineensis*, *see* Oil palm
- Elder, scarlet berried, vitamin C in, **XIV**, 1402
- Electric—
 current, effect on plant and soil, **XV**, (432)
 fencing, **XI**, 30; **XIV**, 1166
 light bulbs for heating hotbeds, **XV**, 140
 motors for the farm, **XI**, 29
- Electrical—
 discharge and plant growth, **XIII**, 4
 resistance methods for soil moisture measurement, **XI**, 26
- Electricity—
 application in horticulture, **XI**, 324; **XIV**, 1017; **XV**, 1085
 for beehive heating, **XI**, 392; **XII**, 390
 for hot beds, **XIII**, 143; **XV**, 134, 140, 1784
 for onion root stimulation, **XIV**, (746)
 for soil heating, **XIII**, 851
 for soil pasteurization, **XI**, 28
 for spraying apparatus, **XV**, 1641
- Electroculture experiments at Chaubattia, **XII**, 1152
- Electro-fermentation of tea, **XI**, 1011
- Electrolysis of seeds, **XIV**, 1191
- Electrolytes and nuclear structure of onion cells, **XII**, (18)
- Eleocharis tuberosa*, antibiotic substances in, **XV**, (1658)i
- Eleusine coracana*, **XII**, 323
- Elgetol spray, *see* Sprays and spraying
- Elm—
 disease, spread of Dutch, **XV**, (599)
 flora, the British, **XIV**, (458)
- Elodea densa*, photosynthesis and dehydration of assimilative tissue in, **XV**, (34)
- Elsinoe*—
dolichi, **XV**, 1838
phaseoli, **XV**, 1993
piri on apple and pear, **XV**, 1579
veneta, **XI**, 79
- Emasculation methods, **XI**, 1082
- Embryo—
 abortion in peach, mathematical model, **XII**, 1244
 culture, **XII**, 764; **XIV**, 18, (1030), (1803)
 lupin, metabolism, **XI**, (31)
- Emilia scabra*, a virus of, **XII**, 241
- Eminium lehmannii*, a medicinal plant, **XIV**, 1910
- Empire products, recent research on, **XI**, 985
- Empoasca fabae*, **XII**, (468); **XIII**, 112
- Emulsions for horticultural sprays, **XV**, 1466
- Encarsia formosa* parasite of greenhouse white fly, **XI**, 452
- Endive—
 fertilizers, phosphatic, for, **XIII**, 459
 yellows disease, **XI**, 806
- Endodermis, significance of oxidation in, **XIII**, 358
- Engitars tenuis*, **XIII**, 588
- England—
 the case for fruit farm census, **XIII**, 711
 case for national certification of nursery stock in, **XIII**, 710
 and Wales land classification scheme, **XV**, 1395
 and Wales, weather regions, **XV**, 1394
- Ensilage—
 apple, **XII**, 696
 of citrus fruit pulp, **XII**, 1139, 1140
- Entomological work—
 in Malaya, **XII**, 606
 in New Zealand, **XIII**, 1633
 in Tasmania, **XV**, 1537
- Entomospirium maculatum* on loquat, **XIII**, 103
- Environment—
 affects colour in flowers, **XI**, 833
 physical, shade modifies, **XI**, 1112
- Enzyme—
 action in pea leaves, **XIV**, 1291
 activity in tomato fruits, **XIV**, 1274
 inactivation, SO_2 vs. blanching for, **XIV**, 1970
- Ephedra*—
campylopoda germination, **XIII**, 689
 spp. trials in Queensland, **XI**, 1521; **XV**, 387
- Ephedrine production in the Empire, **XII**, 633
- Ephestia*—
cautella pest of cacao beans from West Africa, **XI**, 932, 1392
elutella, pest of cacao beans from S. America and other stored products, **XI**, 932; **XII**, 1538, 1539; **XV**, 1284
figulitella pest of dried fruits, **XIV**, 383
- Ephialtes caudatus*, codling moth parasite, **XIV**, 954, 1158, 2025; **XV**, 372
- Epilachna varivestis*, *see* Bean, beetle, Mexican
- Epilobium angustifolium*, abundance on bombed sites, **XIII**, 350
- Epirimerus vitis* control, **XIV**, 549, (1184)
- Epitrix*—
cucumeris control on tomato, **XIV**, 790
 spp. on potato, **XII**, 1388
 spp. tobacco flea beetles, **XIV**, 1705, 1706

SUBJECT INDEX

- Epsom salts for small fruits, XV, 1495
Eriobotrya japonica, see Loquat
Eriophyes—
 caryae, XIII, 1288
 sheldoni, XII, 564, 1473; XIV, 855
Eriosoma lanigerum, see Aphis, woolly
 Erosion, see Soil erosion
Eruca sativa an oil plant, XII, 944
Erucaria boveana, germination in, XIII, 689
Erwinia—
 amylovora, see Fireblight
 aroideae, XIII, 1434; XV, (758)
 carotovora, XI, (1229); XV, 199, 705
 tracheiphila, XIII, 520
 vitivora, XI, 426, 756
Eryngium maritimum an oil plant, XV, 268
Erysimum cheiranthoides as oil plant, XV, 653
Erysimum species as cardiac drug plants, XV, 177
Erysiphe—
 cichoracearum, XIII, 520; XIV, 1267
 polygoni, XI, 1269; XII, (548), 889
 sp. on coffee, XV, 1940
Erythrina—
 bark disease of, XI, 963
 micropteryx as shade tree, XI, 1384
Erythroneura spp., XIII, 112, (845); XV, 1605
Erythroxylum coca, XI, 533; XIII, 1535
 Espalier—
 frameworking, XII, 382
 sun radiation on walls trained with, XIV, 464
 Essential oil, see also under Oil plants—
 Araucaria excelsa, XII, (311)
 Macropiper excelsum, XII, (311)
 lavender, XI, 495
 Leptospermum citratum, XII, 1043, 1044
 mint, XI, 495
 production in British Colonies, XV, 2050
 Esthonia, standardization of fruit and vegetables
 in, XIII, 1206
 Ethanol from dehydrated sweet potatoes, XV,
 (1336)
 Ethiopia—
 agriculture in, XIV, 866
 coffee growing, XIV, 879
 Ethyl—
 alcohol for root stimulation, XI, 186
 mercuric bromide as growth substance, XI,
 658
 mercury phosphate for seed treatment, XIV,
 1277
 Ethylene—
 citrus pectin recovery affected by, XII, 300
 dichloride—
 emulsion, XI, 84; XIV, 160, 663; XV, 1628
 as fumigant, XIII, 1571; XV, 587
 soil injection, XIII, 217
 against peach tree borer, XI, 84; XIII,
 1303; XIV, 600, 1631; XV, 577, 1628
 emanations from ripening fruit—
 apples, XI, 264; XIV, 1941
 bananas, XI, 264
 elimination by brominated activated car-
 bon, XIV, 1941
 lemons, XIII, 627, 628
 pears, XII, 1525
 tomatoes, XIII, 932
 treatment for colouring and ripening—
 fruit in general, XIV, 910
 oranges, XII, 668
 plums, XI, 260; XIII, 307; XV, 869
 tomatoes, XIV, 259
 vital processes in plant affected by, XIII, 694
 Etiolation, relation of radiant energy to, XII, 1177
Euacanthus interruptus, XI, 1175; XII, 1319
 Eubion, a growth substance, XIV, 172
 Eucalypts, the more important Australian, XIV,
 1330
Eucalyptus—
 in Brazil, XI, 1345; XV, 845
 diseases, XV, 1743
 propagation, vegetative, XI, 904
Eugenia—
 caryophyllata, see Clove
 dombeyi, XV, 271
 uniflora in Guatemala, XII, 1482
 Eugenics, plant, XV, 1370
Eumerus spp., XII, 544
Euonymus—
 europaea a gutta percha source, XIV, 722
 nana, flower of, XIII, 1387
 spp., rubber plants, XII, 1069
 spp. a source of gutta percha, XIII, 1388, 1389;
 XIV, 722, 1724; XV, 678
 verrucosa cultivation, XIV, 974
Euphorbia—
 spp. as oil plants, XV, 359
 tirucalli—
 resins, XIV, 1245
 a rubber plant, XIV, 716
Euplectrus agaristae parasite of grape vine moth,
 XV, (128)
Eupteryx stellulata, XI, 1175
 European plants, raw materials from, XV, 1373
Eurotia ceratoides, vitamin C content, XIV, 1397
Euscaphis staphyleoides an oil plant, XV, 268
Eutettix tenellus, see Beet leaf hopper
Euxoa conspicua, XIV, 667
 Evaporating power of air, XIII, 681
 Evaporation—
 checked by methyl cellulose, XIV, 1019, 1468
 and temperature relations, XIV, (19)
Evergestis extimalis on mustard, XIV, 234
 Evergreens—
 cuttings and propagation of broad leaf,
 XIV, 1807
 defoliation affects cold resistance and growth,
 XIV, 296
 Excess symptoms, phosphatic and potassic, XIII,
 1225
 Excised tissues, effect of crown gall on growth of,
 XV, (598)
 Exhibition vegetables, size required for, XV, 133
Exoascus deformans, see Peach leaf curl
Exochomus quadripustulatus, a parasite of woolly
 aphis, XV, 1040
 Expansion chambers for cold storage, XIV, 366
 Experiment Gardens (Panama) Canal Zone, XIV,
 1883
 Experiments, see also Lay out—
 randomized block, XI, (31)
 statistical analysis, XI, (380)
 Explosives—
 effect on soil, XII, 778
 for spread of insecticide dusts, XIV, 1642
 use in orchard, XII, (826); XIII, (770)
 Exudates, concentration gradients in plant, XIV,
 982
 Exudation, osmotic and vitalistic interpretation,
 XIV, (458)
 Fagarine, a possible substitute for quinidine, XV,
 (1995)e
 Fairchild Tropical Garden, XI, 942

SUBJECT INDEX

Falkland Islands, agriculture in, **XII**, 732
 Fall army worm (*Laphygma frugiperda*), **XII**, (880)
 Fanweed, *see* *Thlaspi arvense*
 Farmers' Club, London, library books of, **XV**, 1341
Farming in South Africa, special fruit number,
 June 1943, **XV**, 36
 Fasciation, relation to normal growth, **XV**, 964
 Fats, plant, *see also* Oil, **XV**, (972)
 Fauna, British, bibliography of works on, **XII**, 1561
 Fences, living—
 in Cuba, **XV**, 1236
 in N. Nigeria, **XV**, 1994
 Fencing, electric, **XI**, 30; **XIV**, 1166
 Fennel seed, volatile oils, **XIII**, (656)
 Fenugreek seed, saponin in, **XIII**, (656)
 Fermentation Industries, **A.R.** 1940-1943, **XI**,
 (1054); **XII**, (723); **XIII**, (672); **XIV**, 966
 Fernando Po—
 Araceae of, **XV**, 933
 horticulture, **XV**, 271
Feronia elephantum, **XIV**, 961, 1926; **XV**, 936
 Ferrous ammonium sulphate as possible growth
 promoter, **XII**, 8
 Fertility rules in fruit planting, **XI**, 45; **XV**, 40
 Fertilizers, *see also* Manuring—
 acid or base-forming factors affecting, **XIV**,
 (1030)
 ammonium nitrate preparation, **XV**, 1004
 apple, *see* Apple manuring
 application, intermittent, superior to all at
 once, **XV**, 1681
 ashes as, **XII**, 400
 banana, **XI**, 240, 601, 602
 for British Columbia, recommendations, **XI**,
 49
 for bulbs, **XI**, 135, 826
 calcium cyanamide, injury from use of, **XIV**,
 1515
 cauliflower, *see* Cauliflower manuring
 citrus, *see* Citrus
 coconut husk ash as, **XI**, 1431; **XII**, 257, 263,
 651; **XIII**, 1549
 commercial—
 in California, **XII**, (39)
 in Maine, **XII**, (406), (1270)
 in Texas, **XII**, 819; **XIII**, 395
 common salt as, **XII**, 143
 copper, **XI**, 863; **XIV**, (193)
 dano fertilizer, **XV**, 138
 distributors, **XIII**, 193, (1138); **XV**, 382
 duff briquettes, **XIII**, 63
 Dutch East Indies' needs, **XV**, 812
 essential elements, nine, **XI**, 51
 excess causes burning, **XIV**, 653
 experimental lay-out and analysis, **XI**, 368;
 XV, 26
 for flowering plants, **XI**, 503, 504
 for fruit trees, **XI**, 51, 1113, 1114; **XIII**, 65,
 752; **XV**, 58
 handbook, **XI**, 16; **XIII**, 65
 Huminal B, a peat, **XV**, 25
 the humus, **XIV**, (458)
 hygroscopicity, **XIV**, (1476)
 injection, *see* lance
 inorganic, in Argentina, **XV**, 1474
 lance for soil injection, **XI**, 1114; **XII**, 822;
 XV, 1003, 1469, 1470, 1471
 leaching, **XIV**, 1020
 and leaf composition in apple, **XV**, 482
 liquid, for vegetables, **XII**, 144; **XIII**, 178
 magnesium as a, **XIV**, 1198; **XV**, 1495
 mineral intake estimation, **XIV**, 6

Fertilizers (*continued*)—

minor elements, *see also* Micro-elements and
 Trace elements, **XI**, 473, 863, 1074, 1226;
XII, 821; **XIII**, 208, 1340, 1420; **XIV**, 5,
 648, 804, 950; **XV**, 508, 924
 mixed, moisture relations influenced by
 nitrogenous materials, **XV**, (1406)c
 natural and artificial, how to differentiate
 between, **XII**, 366
 needs, plant tissue testing to decide, **XIV**,
 1671; **XV**, 403, 404
 in New Jersey in war, **XIII**, 66
 nitrate, secondary ion importance in, **XII**, 160
 nitrogen from organic, **XIII**, 64
 nitrogenous—
 in apple orchards, **XIV**, 1513; **XV**, 59
 for citrus, **XI**, 147
 cold injury in peach affected by, **XIV**, 69
 condensation products of cyanamide and
 urea, **XV**, 411
 consumption in U.S.A., **XV**, (972)
 for grapefruit, **XII**, 208
 guanidine as, **XV**, 412
 intake affected by low temperature, **XIV**, 70
 nitrogen availability in, **XII**, 30
 in orchards in southern France, **XV**, 1473
 and pH affect strawberry, **XIV**, 1554
 seedling intake of, **XIV**, 7
 substitutes for, **XIV**, 1069
 theory of use and practice with, **XV**, 1083
 Uramon applied as spray, **XIV**, 72
 from urea-ammonia liquor-37, **XI**, 685
 onion, *see* Onion manuring
 orange, *see* Orange manuring
 organic—
 matter, function of, **XV**, 21
 and mineral, **XV**, 22, 1678
 pea, *see* Pea
 peach, *see* Peach manuring
 pecan, **XII**, 416
 platinum chloride, **XIII**, 208
 P_2O_5 solubility, effect of K salts on, **XIV**
 (19)
 phosphatic, for vegetables, **XIII**, 459, 1336
 phosphoric acid utilization, **XIV**, 1023
 placement, **XV**, 1475
 potassium—
 chloride causes leaf injury, **XI**, 520
 determination of, **XIV**, (19), (1476)
 symposium on, **XIII**, 1182
 various, **XI**, 721-723; **XIII**, 1335; **XIV**,
 1070, 1514; **XV**, 60
 for potato, *see* Potato manuring
 practice in England 1944, **XIV**, (1476)
 requirements—
 leaf diagnosis guide to, **XII**, 816; **XV**,
 1479, 1480
 orchard, determination of, **XI**, 1118
 sodium—
 cyanide, **XV**, (1406)d
 fluorescein no use as, **XIII**, 395
 soya bean, *see* Soya bean manuring
 spraying zinc, copper and manganese, **XI**,
 863
 spreader, ammonium nitrate, **XIV**, 840
 and storage quality, **XV**, 483
 sugar cane, **XI**, 187
 time of application, **XIV**, 1024
 tomato, *see* Tomato manuring
 from town and house waste, *see* Compost
 making
 trials, statistical analysis, **XII**, (1454)

SUBJECT INDEX

Fertilizers (continued)—

- in U.K.—
 - bulletin on, XI, 16
 - for fruit in war time, bulletin, XI, 1113
- for vegetables, *see* Vegetable manuring
- for vines, *see* Vine manuring
- and vitamin content in plants, XV, 1679
- vitamin B₁ inclusion in, XII, 819, 1194; XIII, 395
- vitamins as, XII, 1193
- war time use, XII, 1200

Ferula—

- asafetida*, metabolism and photosynthesis, XIV, 1888
 - pyramidata*, resin from, XIV, 1236, 1725
- Fibre plants, *see also* Agave, Aloe, *Asclepias*, Broom, *Broussonetia*, *Corchorus*, Flax, Hemp, *Hibiscus*, Jute, Mulberry, Ramie, *Sansevieria*, *Sida*, Sunnhemp, *Urena*, *Urtica* and others—
- at Amani, XII, 320
 - in Australia, investigations, XII, 1146, 1147; XIII, 1630
 - in Brazil, XIV, 1694
 - of central and north-eastern Europe, XIV, 698
 - in Costa Rica, XII, 589
 - East African, XIV, 334
 - in German-occupied Russia, XIII, 878
 - for Guatemala, XV, 822
 - of India, XV, 1337
 - malvaceous, XIV, 1692
 - in Mauritius, XIV, 872
 - in Morocco, XV, 1709
 - growing in N. Russia, XV, 622
 - problems in Australia, XV, 369
 - production and processing in Brazil, XV, 820
 - research in N. Zealand, XIV, 2025; XV, 2075
 - in Spain, processing, XV, 1115

Ficus—

- carica*, *see* Fig
- natalensis* as shade tree, XV, 280
- religiosa* cuttings, XV, 761
- spp. as rubber plants, XIV, 716
- sycomorus* in Palestine, XI, (171)

Fidia viticida, XV, (1658)0

Field trials, *see* Lay outFig (*Ficus carica*)—

- canker (*Phomopsis cinerascens*), XIII, 820
- collection at Grasse, XV, 1367
- drying and packing in Palestine, XII, 1212
- Hottentot (*Mesembryanthemum edule*), XIV, 1717
- mosaic spot, XIV, 127
- Phytophthora* rot of, XI, 1168
- pruning, XIV, 1528
- rust (*Cerotelium fici*), XII, 121
- tree borer (*Batocera rufomaculata*), XI, 430
- varieties—
 - in Algeria, XIV, 1492; XV, 1194
 - the Barbary, XIII, 779
 - the Brunswick or Magnolia, XII, (45)
 - the Croisic or Cordelia, XII, (1217)
 - identification, XIII, 43
 - San Piero or Brown Turkey, XIV, 1491
- virus, XV, 93

Fiji Dep. Agric. A.R. 1940, XII, (723)

Fijian agricultural education, XI, 1353

Filbert, *see also* Hazel nut—

- growing in Washington State, XII, 92
- investigations in New Zealand, XV, 383
- mycorrhizas in, XIV, 1104
- pruning, XIV, 546
- soil management for, XIII, 58

Filbert (continued)—

- species of *Corylus* in Far East of Russia, XIV, 111
- weevil, *Curculio uniformis*, XV, 1044
- worm (*Melissopus latiferreanus*), XIV, 605; XV, 1044

Filler trees, apple, XIV, 1480

Fire, effect on vegetation, XIV, (19)

Fireblight (*Erwinia amylovora*)—

- in apple, XI, 1164, 1165; XV, 550
- control by prevention of infection, XIV, (597)
- in pear, XI, 1164, 1165; XIV, 1596; XV, 550

Fish poison plants as insecticides, XI, 180; XIII, 577

Flagellates of laticiferous plants, XIV, 721

Flame throwers for weed control, XIV, 242, 1678; XV, 111

Flat limb in apple, XIII, 1261; XV, 549

Flavine from *Aspergillus flavus*, XV, 656Flax (*Linum*)—

- browning, XV, 1710, (1853)l
- characters related to frost resistance, XI, (131)
- chlorosis due to iron deficiency, XV, 1118
- cytology, XIV, (1803)
- damping off, XV, 1120
- diseases, boron soil treatments and, XIV, (547)
- dodder on, XIV, (1803)
- drought effects on, XIV, 198
- fibres—
 - growth and composition, XIII, 1359
 - statistical study, XV, (1185)
 - water and light affect, XV, 624
- foot rot (*Phoma* sp.), XV, 628
- Fusarium lini*, resistance to, XIV, (1803); XV, 1712
- grey mould (*Botrytis cinerea*), XIV, 199
- growing—
 - in England, XIV, 1206
 - in France, XIV, 196
 - introduction to, XV, (1852)c
 - in New Zealand, XII, 529; XIII, 475, (478); XIV, 195, 675; XV, 623
 - in S. Australia, XIV, 676
 - in Tasmania, XV, (1852)n
 - temperature and time of sowing affect, XV, 1713
 - in Victoria, Aust., XII, 935
- hail damage, XIII, 1361
- harvesting in N.Z., XIII, (883)
- leaf characters influenced by withholding nutrients, XIV, 1686
- and linseed manuring, XII, 528; XIII, 1360; XIV, (200)
- pasmo disease (*Sphaerella linorum*), XIII, 476, 882
- pests, XIV, 954
- Phoma* stem disease, XV, 1711
- pot cultures of oil varieties, XV, 625
- potash affects favourably, XII, 936
- powdery mildew, hail and heat canker, XI, 1232
- processing, need for research in, XV, (2059)h
- production—
 - from different types of *Linum*, XII, (1412)
 - in occupied Russia, XIII, 878
- recognition and sex determination, XIV, 677
- research—
 - in Northern Ireland, XIV, 958
 - in Tasmania, XIII, 879
 - in Victoria, Aust., XIII, 880
 - at Waite Institute, XI, 1231; XIV, 676

SUBJECT INDEX

- Flax (*continued*)—
 retting, *Bacterium subtilis* causes, XIV, 669
 root rot, XV, (598)
 rust (*Melampsora lini*), XII, (1454); XIII, 477; XIV, 1688; XV, (758), 1117
 salinity tolerance, XIV, 1207
 seed-borne disease prevention, XII, 1391; XIII, 881; XV, 626-628, 1119, 1120
 seed—
 hygroscopicity, XIV, 702
 iodine number, XIV, 1208
 oil formation in, XV, (1852)z
 respiration, XIV, 703
 seedling blight (*Colletotrichum lini*), XIII, 881; XV, (598)
 spray damage by Spergon, XIV, 197
 stem break and browning (*Polyspora lini*), XII, (982); XIII, 881
 straw, mineral element content, XV, (1853)a
 threshing, injuries during, XV, 1116
Thysanoptera found on, XIV, (200)
 varieties—
 in Nebraska, XV, 1828
 registered in U.S.A., XIV, 194
 weed control in, XIV, 1689
 wilt disease (*Fusarium lini*), XIV, (1803); XV, 1712
 wither top due to Ca deficiency, XIV, 674
 zinc necessary for, XIV, 1687
- Flies—
 fruit, *see* Fruit
 house, toxicity of piperic acid to, XV, 1062
- Flit, effect on man, XI, 179
- Flora—
 of bombed areas, XIII, 350
 British, bibliography of works on, XII, 1561
 of the Dead Sea, desert, XII, (1496)
 of Gulf of Guinea, XV, 933
 of Iran, investigations, XV, 1372
 of Krasnodar, XV, (34)
 of Portugal, sub-spontaneous vascular, XIV, 984
 of Portuguese provinces, XV, 429
 and vegetation of Tadzhikistan, XV, (34)
- Floral stimulus, translocation in *Xanthium*, XIII, 682
- Floriculture, manual on, XII, 1564
- Florida—
 agric. Exp. Stat. A.R.: 1941/42, 1942/43, 1939/40 and 1940/41, XV, 930, 931, (946)
 tropical and sub-tropical fruits of, XI, 943; XV, 1975
- Florists' crops, day length and temperature affect, XIV, 1301
- Flow of liquids and gases, XIII, 1308
- Flower(s)—
 annual, in Pennsylvania, XIII, (245)
 in Britain, a manual, XV, 2063
 bud, *see* Fruit bud
 care of cut, XII, 197; XIII, 243; XIV, (1312)
 development, mineral nutrition and, XI, 370
 evaluation of quality, XI, 447
 fading in rose, XII, 542
 forcing, manual on, XV, 363
 greenhouse, deficiency symptoms in, XI, 502
 growing—
 in Argentina, XIV, 1299
 compost value to, XIII, 61
 in Iowa, XI, 1030
- Flower(s), growing (*continued*)—
 manual, XII, 1564
 in Spain, XV, 1186
 manuring, XI, 503, 504
 in Pennsylvania, annual, XII, 195
 pot, *see* Pot
 production—
 changed to vegetable production, XI, 822; XIV, 1201
 cutting affects, XII, 539
- Flowering—
 acceleration by light control, XII, 538
 in citrus seedlings, inducement of early, XI, 1310, 1311
 dates in fruit trees, foretelling, XI, 393
 and fruit maturity, intervals between, XII, 1240, 1241; XIII, 57
 hormone, movement of, XIV, 438, 992, 1001, 1002
 influences on—
 climate, XIV, 1506, 1507
 growth substances, XII, 1183; XIII, 1551; XIV, 85
 light, XII, (18), 538
 nitrogen, XV, 24
 various, XIV, 1067
 weather, XIII, 743
 measurement of movement during, XIII, (31)
- Fluids from plant tissues, a press to recover, XI, 666
- Fluorescein—
 effect on growth denied, XV, 747
 -induced parthenocarpy, XV, 14
- Fog affects glasshouse plants, XII, 146
- Foliation delayed—
 causes of, XII, 59-61; XIV, 64; XV, 37
 radiation a criterion of, XI, 1112
- Folic acid, vitamin, XIV, 1406
- Folklore of vegetables, XV, 1076
- Fomes—
lignosus, XI, 577; XIV, 955, 1363
noxius, XIV, 956
- Food(s)—
 composition of Ceylon, XIV, 401
 contamination by poison gas, XII, 698, (779), 1569; XIII, 634
 crops—
 available from Amani, XII, 604
 improvement in East Africa, native, XIII, 573
 production among young rubber, XII, 635
 dearation, XIV, (412)
 in Hawaii, dietetic aspects, XIV, (1370)
 industries manual, XII, 315
 investigation, index to literature on, XII, 711
 native, in Tanganyika, XV, (865)
 pests of stored, XIII, 635
 plants—
 origin of some East African, XV, 1915
 in tropics, pests of, XIII, 271
 uncultivated, used by American Indians, XV, (431)
 preservation, *see also under different processes*—
 German manuals, XII, (1536)
 reports of Canadian Committee 1941 and 1942, XIV, (968)
 a review, XIV, 904
 work in Australia, *see also* A.R.s of C.S.I.R., XV, 369, 1348

SUBJECT INDEX

- Food(s) (*continued*)—
 production—
 on estate lands in S. India, XIV, 326
 in S. Africa in wartime, XIV, 1448
 Technology Division, California, work since 1912, XV, 1310
 value of fruits and vegetables, XII, 701
- Forcing—
 lilac and potatoes by means of injury, XIV, 456
 salad crops, XII, 484
- Forcipomyia* sp. and pollination of cacao, XIV, 1896, 1898
- Forecasting harvest dates, XI, 393; XII, 1240, 1241; XIII, 57; XV, 480
- Forest pests, chemical destruction, XIV, (635)
- Forestry, use of composts in, XIV, (458)
- Forficula auricularia*, XII, 122
- Forgaria Valley, formation of swamps and peat deposits of, XV, 146
- Formaldehyde for virus inactivation, XIV, 1703
- Formalin—
 for soil sickness, XV, 1656
 for stimulating young trees, XIV, 459
- Formulae—
 chemical and other, XV, 2062
 plant science, XII, 312
- Forsythia*—
 growth substances and, XI, 1055
 suspensa, root initiation in, XIV, (1816)
- Fragaria*, *see also* Strawberry—
 iinumae, the Japanese strawberry, XII, 409
 new types and hybrids in, XV, (526)
 vesca as indicator of strawberry viruses, XII, 437
- Frame cover for vegetables grown in open, XIII, 1341
- Frames—
 crop production in, XII, 900, 901; XIV, 183, 184
 disease of vegetables in, XIV, 1202
- Frameworking fruit trees, XII, 46, 379-382, 1222; XIII, 47, 387, (732); XV, 991, 1019
- France, horticultural research in, XV, 1367
- Frankliniella*—
 cephalica bispinosa, XI, 868
 fusca, XIII, 486
 insularis, XIV, 1280
 occidentalis, HCN fumigation, XIV, 137
 vaccinii, XII, 1320
- Fraxinus excelsior*, leaf abscission, XII, 741
- Freezing, *see also* Storage, frozen—
 effect on utilization of canned foods, XIV, 1983
 points of certain deciduous fruits, XIV, 1385
- French North Africa, fruit growing in, XV, 1193
- Friedsdorf-Bad Godesberg horticultural research station A.R. 1939/40, XII, 713
- Frost, *see also* Cold—
 damage—
 to apple, *see* Apples
 and boron deficiency, possible confusion, XV, 1550, 1552
 in citrus, XI, 856, 857, 1318, 1319; XII, 1467; XIII, 550; XV, 1205
 and control in orchards, spring, a review of work on, XV, 2080
 determination in plant, XII, 100
 in England 1939/40, XII, 421, 422
 in Finland 1939/40, XI, 418
 to fruit blossom, XI, 747, XII, 423, 1286; XIII, 808
 Frost damage (*continued*)—
 fruit drop, checked by growth substance sprays, XV, 1809
 in Germany, XII, 424-429, 1289, 1295; XIV, 567-569, 1583
 ground cover influences, XIV, 1581
 to lemon, repair of, XII, 1467
 location and cultivation influence, XIV, 125
 manuring affects incidence, XI, 856, 857; XIV, 69, (161)
 in north and central India, XIV, 124
 to oranges, XV, 1205
 to peach trees, XII, 1294; XIV, 69
 pest damage increased by, XIV, 1623
 in Poland in 1939/40, XIV, 1116
 to pome fruits in Germany, XIV, 567
 prevention, German manual on, XII, 1295
 to raspberry, XIII, 422
 restoration after, XII, 844, 1467; XIII, 807; XIV, 1584; XV, 1022, 1557
 by snow, XIII, 90
 soil conditions and, XV, 1554, 1555
 spraying after, XV, 1556
 to strawberries, XIII, (81)
 in Sweden 1939/40 and 1942/43, XII, 1285; XIV, 123
 in Swiss orchards 1939/40, XII, 101
 in U.S.A. 1940, XII, 1287, 1288, 1290-1292, (1296); XIII, 1098
 variation in same orchard, XII, 98
 to vines, *see* Vines
 forecasting spring, XII, 842
 and the fruit grower, a manual, XV, 2064
 hoar, plant-climatological work, XIV, (19)
 incidence, meteorological factors affecting, XV, 1554
 killing and hardiness, a review of work on, XV, 918
 protection—
 by breeding, *see* resistance, breeding for
 by double working, *see* Apple, double working
 of avocados by earthing up, XII, 584
 of fruit trees in general, XI, 222; XIV, 1115; XV, 1554
 glass fibre mats for, XII, 1364; XIII, 89
 by growth substance spraying which prolongs dormancy, XII, 1012; XIII, 811; XV, 805
 by heaters, XI, 151-153, 519, 859, 1153; XII, 561; XIV, 566; XV, 1884
 methods, low training, XI, 1316; XII, 820, 843; XIV, 41, 81
 by painting, XV, 540
 by paper shields, XII, 1365
 by spraying oil to prolong dormancy, XV, 1348
 by stem builders, *see* Apple, double working
 meteorological factors affecting, XV, 1554
 by straw covers, XI, 1155; XV, 1559, 1560
 of strawberries, XIII, 810
 various methods, XIII, 549; XV, 2064, 2080
 of vines, *see* Vines
 watering for, XII, 431
 resistance—
 anatomical structure and, XIII, 1239
 in apples, *see* Apple, frost injury and resistance
 breeding for, XI, 420; XIV, 483-485, 655, (1184)
 causes of, XIV, 1117

SUBJECT INDEX

Frost resistance (*continued*)—

- in citrus, **XI**, 1317; **XII**, 1463
- of common plants, **XIV**, 564
- determination, **XIII**, 1240
- origin affects, **XI**, 419
- in peach, *see* Peach, cold resistance
- physiology of, **XI**, 365, 366; **XV**, 538
- plant anatomy and, **XIV**, 565
- in plums, *see* Plum
- in pome fruits, *see* Pome fruits
- rootstock effect in deciduous fruits, **XII**, 798
- in stone fruits, **XII**, 426; **XIII**, 809
- test chambers, **XIV**, (1184)
- tests with cold liquids, **XV**, 539
- in vines (American), **XII**, (1296)
- tropical plants affected by, **XI**, (965); **XII**, 239

Frozen dessert, locker and pack, *see* Storage, frozen

Fructosan determination, **XV**, (1336)

Fructus and fruit, suggested use of terms, **XIV**, 979

Fruit—

- acid, how to save sugar in cooking, **XI**, 1499
- acresages—
 - in Great Britain, **XV**, 439
 - in New Zealand, **XV**, 433
- of Alberta, wild, source of vitamin C, **XIV**, 1394

aromatic substances in, **XIII**, 1576

blossom, frost damage, *see also under particular fruits*, **XI**, 747; **XII**, 423, 1286; **XIII**, 808

Board, Deciduous, of S. Africa, **XV**, 1362

breeding, *see* Breeding

bud—

- development in peach and nectarine, **XIV**, 66
- formation and yield in apple, pear and apricot, **XI**, 396
- initiation, **XIII**, 1095
- opening retarded by growth substances, **XIV**, 85
- size related to set in apple, **XIV**, 60
- wine, **XI**, 63

butters, **XIII**, 1083

canned, vitamin C in, **XIII**, 324, 1610

canning, *see* Canning fruit

colour and size, factors affecting, **XII**, 393

colouring, *see also* Colour in fruit—

artificial, **XIV**, 1387

after harvest, **XI**, (737)

composition, **XI**, 1090; **XII**, 315; **XIII**, 1578; **XIV**, 1957

concentrates, *see* Juice concentrates

conference—

- at Maidstone, Kent, **XV**, 438
- at Worcester, **XV**, 1346

deciduous—

- climate and, **XIII**, 34; **XIV**, 64, 65
- freezing points of certain, **XIV**, 1385
- green manuring, **XIII**, 755
- grey mould of (*Botrytis cinerea*), **XI**, 1171
- intercropping, **XV**, 491
- little leaf, *see* Little leaf
- manuring, *see* Manuring
- pruning, *see* Pruning
- rootstocks, *see* Rootstocks

dehydrated, *see* Dried fruit

development—

- causal sequence of, **XIII**, 388
- nutrient accumulation during, **XV**, 393
- dried, *see* Dried fruit

Fruit (*continued*)—

drying, *see* Drying fruit

emanations of stored, *see* Storage emanations

exports—

from Argentina, **XIII**, 769; **XIV**, (528)

citrus from S. Africa, **XI**, 518

fall, *see also under particular fruits*—

in cherry and apricot, **XIV**, 68

cultural methods for preventing, **XII**, 79

in peach, **XI**, 719

in pear, causes of, **XI**, 1108-1110

spraying to prevent or retard, **XI**, 735, 1126-1128, 1140; **XII**, 76-79, 395-397, 754, 805-811, 1156, 1265-1268; **XIII**, 667, 670, 765-767, 1194-1200; **XIV**, 522, 1540-1542; **XV**, 69-71, 499, 500, 1019 1487-1492, 1809

as varietal character in apples, **XV**, 481

farm census in England, need for, **XIII**, 711 1141

flies—

of *Anastrepha* genus, *see* *Anastrepha* and Fruit flies, Mexican, and West Indian

in Argentina, **XII**, 873, 874

bibliography, **XIV**, 1153

biological control, **XI**, 871

in citrus orchards, **XIII**, 977

loquat, **XI**, 431

Mediterranean (*Ceratitis capitata*)—

activity at low temperatures, **XII**, 567

biology in Palestine, **XIV**, 1327

on papaya, **XIII**, 1497

in S. Africa, **XI**, 82; **XII**, 567; **XIV**, 853

in Western Australia, **XV**, 1612

Mexican (*Anastrepha ludens*), **XII**, (235); **XIV**, 1849, 1886; **XV**, 798, 799, 1231

Rhagoletis spp., **XII**, (462)

Queensland (*Strumeta tryoni*), **XI**, 585, 1189; **XIV**, 1885

response to temperature, **XIV**, (1662)

in Tucumán, **XV**, 799

West Indian (*Anastrepha* spp.), parasites of, **XII**, 260

food values, **XII**, 701

frozen, microscopic studies, **XIII**, (335)

frozen pack preservation, *see* Storage, frozen locker and frozen pack

gardens at East Malling, **XIV**, 33, 1477; **XV**, 1418

growing—*see also* Orchards—

in Argentina, **XIII**, (770)

in Australia, **XIV**, 1456

in Baluchistan, **XIII**, 1026

in Bermuda, **XV**, 302

in California, home, **XI**, 35

in Croatia, **XIV**, 466

deciduous, manuals, **XI**, (648), 1507, 1567; **XIV**, 54, 416, 1032, 2011; **XV**, 38, 920, 1452, 1453, 2061

in desert regions in southern Russia, **XIV**, 435

in Egypt, **XI**, 1094

in England—

commercial, **XV**, 438, 439, 920, 2061

domestic, **XI**, 34; **XII**, 418, 1567; **XIII**, 36; **XIV**, 33, 416, 1477; **XV**, 1418

in Germany, **XI**, 381, (648); **XIV**, 28, 54, 56, (528); **XV**, 481, 1452, 1453

in India, deciduous, **XIII**, 1544

in Italy, **XI**, 1094

in the Karelian-Finnish S.S.R., **XIV**, 22

in Kashmir, **XI**, 1093

SUBJECT INDEX

Fruit growing (*continued*)—

- in Kirov Province, U.S.S.R., XIV, 21
- in N.S. Wales, XIII, 1139
- in Nigeria, XV, 303
- in the north of Russia, XIV, 20
- in Palestine, XI, 1094
- in Peshawar valley, XIV, 351
- in the Province of Omsk, XIV, 27
- in the Punjab, XI, 220, 221
- rainfall necessary in Germany, XV, 481
- Rhodesian home, XIII, 377
- science and, XII, 1207
- in Siberia, work of Kaščenko and Olončenko, XIV, 30
- in Sicily, XI, 1094
- small, early bearing trees in N. York, XIV, 1054
- soil type influence on, XIV, (528)
- in South Africa, XI, 33, 698; XIV, 1033; XV, 36
- standards or half-standards, choice of, in deciduous, XIV, 1052
- in Sweden, XIV, 460; XV, 437
- in Switzerland, XI, (648), 1094; XIV, 1032; XV, 38, 1410-1413
- in tropical Queensland, XIV, 1877
- in Tunisia, XV, 366
- in U.S.A., a manual, XI, 1507
- in U.S.A., statistics, XI, 700
- in U.S.S.R., *see also particular regions*, XIII, 378; XV, (74)
- in the Urals, XIV, 24
- in Walcheren, Holland, XV, 1414
- in Yakima Valley, Wash., XIII, 35
- growth affected by pollen, XIII, 388; XIV, 1503
- hardiness, *see* Frost resistance
- industry, outlook throughout the world, XI, 696
- investigations, *see particular species and places*
- jelly making from Indian, XII, 688
- juice, *see* Juice, fruit
- maturity determination by—
 - colour chart, XV, (1493)d
 - pressure gauge, XIV, 523
 - spectrophotometry, XIV, 1938
- nutritional index of, XII, 289
- nutritive unit cost values, XV, (2059)u
- peeling by explosion, XIV, 1981
- in Pennsylvania, composition of wild, XI, 1090
- powders, XI, 628
- preservation, *see also* Storage, Canning, etc.—
 - methods, domestic, XI, 635; XII, 1544; XIII, 1070, 1071; XIV, (945), 1984
 - in the Punjab, XIII, 1591; XIV, 1956
 - quick freezing methods, *see* Storage, frozen locker
 - in SO₂, XII, 687
- preserved, detection of adulteration in, XII, 1545
- processing—
 - in Ceylon, XIV, 395
 - manual, XV, 2014
- production—
 - figures, Swiss, XIII, 1203
 - figures in Victoria, Aust., XV, 1408
 - in Washington and Oregon, XII, 788
- products—
 - citrates and tartrates, XIV, 927
 - colour retention in, XI, 636

Fruit products (*continued*)—

- phosphate determination in, XIII, 1588
- polybasic acids in, XIII, 1586
- potassium determination in, XIII, 1587, 1589, 1590
- work in Australia, XIII, 1630
- purées, XI, 628
- quality in shops, XIV, 911
- ripening—
 - 2,4-dichlorophenoxyacetic acid influences, XV, 870
 - ethylene used for, *see* Ethylene treatment
- seed germination, influence of parent on, XIII, (1177)
- set—
 - possible use of growth substances to increase, XIII, 1465
 - spraying to reduce, XI, 402, 732, 733, (737); XII, 74, 75, 805, 1260, 1262-1264; XIII, 745, 746; XIV, 86-89, 1080, 1536, 1537, (1545); XV, 64, 68, 493-498, 524, 1019, 1359, 1465, 1466
 - weather influences, XIII, 743
- size, soil moisture and, XII, 1254
- small—
 - juice from, XIII, 1077
 - vitamin C content, XIII, 1577
- storage, *see* Storage
- sulphuring during drying process, XII, 1126, 1129; XV, 902
- surface area measurement, XIII, 744
- syrups, frozen pack, XV, 898
- thinning, *see* Thinning
- tissues, inactivation of browning system in frozen stored, XII, 1529
- trees—
 - deciduous, dormancy breaking in, XIII, 1186
 - deficiency diagnosis, *see* Deficiency
 - juvenility and maturity in, XIV, 1505
 - planting out technique, XIV, 1367
 - removal, XV, 504
 - spacing, XV, 504, 1455
 - statistics in Roumania, XV, 1415
 - vigour measurements, XIII, 1142
 - wild, of S. Daghestan, XIII, 722
- tropical—
 - nutritive value, XIV, 919
 - and sub-tropical, of Florida, XV, 1975
- utilization in Switzerland, proposals for, XIII, 1575
- varieties—
 - for California, XV, 775
 - for home garden, a North American list, XV, 916
 - in Iowa, XIV, 36
 - in North America, register of new, XV, 440
 - in Sweden, XV, 987
 - systematic description, XV, 1430
 - in Trans-Urals, XIV, 23
 - trials at Wisley, England, rules governing, XV, 1072
 - vitamin content of various, *see* Vitamins
 - wastage, XI, 1446
 - weight increase in final stages, XIV, 1539
 - yields—
 - in Sweden 1942, XIV, 526
 - in Switzerland 1941/43, XV, 1413
 - weather influence on, XIV, 463

Fruiting—

- age of first, factors affecting, XV, (1493)b
- physiology of, in fruit trees, XI, 393, 1107

SUBJECT INDEX

- Frustulia rhomboides saxonica* for microscopes, XV, 1375
- Fuchsia—
cultivation in New Zealand, XV, 1860
rust, XIV, (834)
- Fume resistance in plants, factors affecting, XV, 958
- Fumigants—
chemical constitution and toxicity, XV, 1069
sorption of, XV, (1185)
- Fumigation—
of banana cars with HCN, XIII, 1564
with carbon disulphide, XV, 259, 587
with carbon tetrachloride, XIII, 1571
chambers, description of small, XV, 1070
with chloropicrin, *see* Chloropicrin
of citrus, *see* Citrus
with cyanide, *see* HCN
with derris (burnt), XII, 892
with Dowfume, XIV, 1810
of dried fruit, XV, 344
with ethylene dichloride, XIII, 1571; XV, 587
with HCN, *for detail*, *see* HCN, XI, 376; XII, 1477-1479, (1480); XIII, 1293, 1343; XIV, 137, 312, 627, 857, 1953; XV, 262, (270), 1168, 1210, (1232)
injury to soya bean, nicotine, XIV, 1289
liquid, injector for, XII, 893
with methyl bromide, *see* Methyl bromide
with methylalloy chloride, XIII, 1630
with nicotine, XIV, 656, 1289
of nursery products, XIII, (451); XIV, 627
with paradichlorobenzene, *see* Paradichlorobenzene
of pea warehouses, XIV, 1953
of pests in India, XV, 587
with pyrethrum (burnt), XII, 892
soil, XII, (1347), 1575; XIV, 657, 661, 1681; XV, 741
of stored products, XII, 275; XV, 344
tents, XIII, 979, 1482
with trichloroacetonitrile, XV, 344
of vine, XIV, 628
- Fungal infection and nutrients in citrus, XIII, 254
- Fungi—
the advance of the, a book, XI, 643
aquatic, XIV, 2004
dictionary of, XIII, 1621
diseases caused by, immunity of fruit trees to, XIV, 1134
edible—
Boletaceae, XIV, (1803)
Boletus versipellis, XV, 755
Delastriopsis oligosperma, XV, (1185)
manual, XI, 126; XIII, 1622; XIV, 1433
nutrition value of protein of, XIV, 1296
and poisonous, XI, 126
Russula genus, XIII, 229
freezing preservation of, XIII, 1272
growth, reflector scale for measuring, XIII, (1283)
industrial uses of, XIV, 1434
as laxatives, XV, (1852)r
and modern affairs, XIV, 1294
nomenclature, C. G. Lloyd's proposals, XIV, (1662)
parasitic, of North-West Frontier Province of India, XIV, 1599
root—
disease, a manual, XV, 915
-infecting, XV, 1573
seed-borne, *Alternaria*, XV, 139
- Fungi (*continued*)—
soil, manual of, XV, 1342
of Uganda, parasitic, XIV, (903)
vitamin—
deficiencies of filamentous, XIII, 17
occurrence in, XIII, 18
- Fungicidal action of reagents for amino acids, XV, (598)
- Fungicides, *see also* Sprays and spraying—
a catalogue, XIV, 615
and insecticides in Maine, XII, (462), (1347)
progress in, XV, 1633
synergism as aid to conservation of, XIV, (1184)
- Fungus—
mycelium, Holz's method of demonstrating, XIII, 823
/virus association in beans, XIV, 1788
- Funtumia elastica* a rubber plant, XII, 1068; XIII, 1025; XIV, 716, 721; XV, 376, 377, 932
- Furcraea gigantea* in Mauritius, XIV, 872
- Furnace, economy in heating glasshouse, XV, 1093
- Furrows, gauging, XI, 1086
- Fusaria* a source of vitamin B, XV, 2026
- Fusarium*—
avenaceum on beans, XV, 749
on broad bean, XIV, 1795
conglutinans, XIV, 1258; XV, 1774
conglutinans, var. *callistephi*, XV, 238
on cucumber, XIII, 520; XIV, 1757
dianthi, XIV, 1304
lini, XIV, (1803)
lycopersici and *F. bulbigenum* v. *lycopersici*, XI, 815, 1264; XII, 1438; XIII, 213, 933, 1435; XIV, 784, 1279, 1778; XV, (598), 1173, 1174
moniliforme on sunnhemp, XV, 631
orthoceras—
on castor bean, XII, 1409
causes vascular disease in gladiolus, XIV, 1812
oxysporum—
cubense, *see* Banana panama disease
lilii, XV, 770
lini, XV, 1712
niveum, XIII, 197
-resistant water melon, XV, 1790
retusum, XIV, (268)
sambucinum on vegetable marrow, XV, 1793
solani var. *minus*, XIV, (710)
sp. attacking pea, XI, 1273; XIV, 1801
wilt of musk melon, XV, (758)
wilt of tomato, *see* *Fusarium lycopersici*
- Fusicladium*—
cerasi, XIV, 1603
dendriticum and *pirinum*, *see* Apple and Pear scab
pirinum var. *pyracanthae*, XIV, (1816)
- Galla verrucae*, XIII, 424
- Gallium for citrus plants, XIV, 304
- Galls—
formation in the light of specialization and immunity, XIV, (635)
reaction of plant to aphids, XIV, 597
on roots of citron-water-melon hybrid, XV, 1789
- Gambia Dep. Agric. A.R. 1939/40 and 1941/42, XI, (1054); XIII, 341
- Gambrus stokesii*, XV, 1624

SUBJECT INDEX

- Ganoderma*—
lucidum causes citrus root rot, XV, 1891
pseudoferreum, XI, 577
- Garcinia*—
echinocarpa, seed oil, XII, 249
mangostana, see Mangosteen
- Garden—
 Florida, ground cover for, XV, 760
 food from the, XIII, 177
 fruit, in England, XI, 34; XIV, 33, 1477
 fruits for the home, American, XV, 916
 science, an English manual, XI, 646
 tools, rust removal from, XI, 354
 walled, at Bradbourne, E. Mallings, XV, 1418
- Gardenia—
 bud development, XIII, (245)
 culture, XI, 132
 diseases, XIV, (1816)
 soil fumigation against eelworm, XIV, 1810
- Gardening—
 in Hawaii, XIV, 363
 in El Salvador, XV, 1234
 manual, English, XIV, 416; XV, 2070
 in Spain, XV, 1187
- Garlic—
 cultivation—
 in England, XIV, (734)
 in N. Africa, XIV, 1255
 in Texas, XIII, 1403; XV, 1766
 extracts, XIV, 1996
 the oxidase of, XV, (2060)e
- Garrya elliptica* inflorescence, XIV, (834)
- Gas(es)—
 flow of, XIII, 1308
 illuminating, potato treatment with, XIII, 869
 plant affected by, XI, 376; XII, (779); XIII, 1125; XIV, 1588, 1589
 poison—
 effect on crops, XII, (779)
 food contamination by, XII, 698, (779), 1569; XIII, 634
 -tight fabric Koroseal, XIII, 1482
- Genetics—
 applied to plant breeding in India, XIV, (1030)
 of *Coffea arabica*, XI, (248)
 of onion, XIV, (1803)
- Geneva Experiment Station N.Y., see New York agric. Exp. Stat.
- Gentiobiose in tomato roots, formation of, XI, 677
- Geology of South America, XIII, 1110
- Geomys* genus in south-west U.S.A., XI, (89)
- Georgia—
 Exp. Stat. A.R. 1940/41, 1943/44, and 1938/39-1941/42, XII, 326; XV, 1349, 2074
 Mountain Experiment Station, XV, 1349
 U.S.R., citrus nursery work in, XI, 1309
- Geranium—
 cuttings, XII, 1399
 oil, XI, 1393
 viruses, XI, 825
- German horticultural institutes, XII, 364
- Germany, areas devoted to vegetables, XIV, 163
- Germination—
 influence of parent on fruit seed, XIII, (1177)
 inhibitors, XIII, 689
 problems, XIII, 688
- Ghada tree of Arabia (*Haloxytonum persici*), XIII, 1002
- Gherkin cultivation—
 in England, XIV, (734)
 in Queensland, XI, 809
 in S. Australia, XI, 115
- Gingelly (*Sesamum orientale*) cultivation in Ceylon, XIII, 604
- Ginger (*Zingiber officinale*)—
 cultivation—
 in Costa Rica, XII, 631
 in Cuba, XI, (1395)
 in Florida, XV, 1947
 processing, XI, 1488
 production in Puerto Rico, trials on, XIV, 1908
 trials in Queensland, XV, 387
- Ginkul, S. G., an authority on sub-tropical plants, XV, 263
- Ginseng (*Panax ginseng*) cultivation, XV, 657
- Giru bean for green manuring, XII, 1026
- Gladiolus—
 botrytis or core rot, XIV, 1308; XV, 772, 1190
 corms—
 chilling affects germination, XIV, (834)
 mercuric chloride adsorption by, XII, (200)
 size and flower removal, XIV, 1811
 culture, XI, 134
 neck rot (*Rhizoctonia*), XV, 1191
 rots (*Septoria* and *Sclerotinia gladioli*), XV, 241
 thrips (*Taeniothrips simplex*), XII, 336, (468); XIV, (297); XV, 773
 vascular disease due to *Fusarium*, XIV, 1812
- Glass—
 fibre mats for frost protection, XII, 1364; XIII, 89
 repairs to, XI, 1088
- Glasshouse—
 air conditioning at Pasadena, Calif., XIII, 849
 controlled low temperature, XIV, 655
 crops—
 in England, XI, 92, 449; XII, 899, 1354-1357; XIV, 183, 1201; XV, 1073
 experimental lay out, XIV, 184
 experiments show effects of sodium acetate, XIV, 185
 fertilizer excess dangerous to, XIV, 653
 flowers, XII, 535; XV, 363
 in Germany, XIII, 850
 health and food value of, XIII, 1333
 manuring, XI, 783
 neutralizing alkaline medium for, XII, 510
 in Russia, XIII, 458
 SO₂ and light affect, XII, 146
 water or gravel culture, XII, 535; XV, 1693
 electric, XII, 983
 fumigation, XIV, 186, 656
 heating, fuel economy, XV, 1093
 hygiene, see also pests, XIII, 144
 leaf tyer (*Phlyctaenia rubigalis*), XIII, 1347
 pests—
 DDT aerosols for, XV, 1762
 fumigation with HCN, XIII, 1343
 prevention in experimental, XII, 1358
 red spider, see *Tetranychus telarius*
 soil—
 controlling pH of, XV, 1690
 heating, XIV, 654
 temperatures, XII, (351); XIV, 1460
 white fly (*Aleurodes (Trialeurodes) vaporariorum*), XI, 452; XIV, (297); XV, 1692
 windows automatically opening, XV, 1691
 wireworms in, XIII, 145

SUBJECT INDEX

- Gloeodes pomigena*, see Citrus sooty blotch
- Gloeosporium*—
album, XIV, 1606; XV, 944
ampelophagum, XIV, 1143
fructigenum, XIV, 1145; XV, 1581
olivarium, XIII, (109)
 sp. on apple, XII, 1316; XIV, 132; XV, 563
thunellii tulipae, XI, 835
venetum on *Rubus*, XII, 1302
- Glomerella* disease of orange, XI, 866
- Glossonotus crataegi*, XV, (1658)z
- Gloxinia disease (*Phytophthora cryptogea*), XV, 768
- Glutamine exudation from lawn grass, XIV, 981
- Glutathione as dormancy breaker in buds, XI, 344
- Glycine, a growth substance, XI, 340
- Glypta ruficinctella* parasite of oriental fruit moth, XIV, 1630
- Gnorimoschema operculella*, XII, (1390)
- Godetia, a wilt disease of, XI, (836)
- Goitre and iodine deficiency in vegetables and water, XI, 379
- Gold Coast—
 agriculture, XIV, 1879
 Ashanti A.R. on Agriculture 1943/44, XV, 368
 Central Province, A.R. on Agriculture 1943/44, XV, 377
 Dep. Agric. A.R. 1939/40-1943/44, XI, 1027, 1514; XIII, 342; XIV, 1438; XV, 932
 Eastern Province, A.R. on Agriculture 1943/44, XV, 376
 Western Province A.R. on Agriculture 1943/44, XV, 378
- Golden rod (*Solidago leavenworthii*), growth substances and, XIV, 720
- Gooseberry—
 breeding, XII, 87
 the Cape (*Physalis peruviana*), XI, 597; XII, 1368; XIV, 531; XV, 75, 536
 Chinese (*Actinidia chinensis*), XIII, 70; XIV, 406, 530
 Indian (*Phyllanthus emblica*), vitamin C content, XIV, 1398
 mildew, American (*Sphaerotheca mors-uvae*), XI, 1162
 moth in Sweden, XIII, 1304
 in Ontario, XIV, 1084
 pests, XII, (867)
 preservation with SO₂, XIV, 1985
 red spider (*Bryobia praetiosa*), XII, (138)
 sawfly, XIII, 1304; XIV, 1610
 variety trials in Sweden, XIII, 407
- Gophers, pocket (*Geomys*), XI, (89)
- Gorse biological control by *Apion ulicis*, XIV, 954
- Gossypium hirsutum*, photosynthesis affected by dehydration of, XV, (34)
- Gourds, useful and ornamental, XI, 133; XIII, 519; XV, 709, 710
- Graft(s)—
 hybrids—
 in general, XI, 17, 1254; XII, 9
 mandarin and citrangequat, XII, 203
 of mountain ash, XIII, 721
 in monocotyledons, XV, (431)
 union, see also Wound healing—unusual type in white fir, XV, 1434
 xylem formation from ring, XIV, (1545)
- Grafting, see also Topworking and Frameworking—
 after care, XII, 374; XIII, 381
 alkaloid content modified by, XV, 156, 658, 659
- Grafting (continued)—
 apples, XI, 715, (737)
 atropine transference on, XII, (1195)
 avocado, XII, 1015
 bark—
 new method, XII, 793
 for transmission of psoriasis, XIII, 252
 bench, XII, 375
 bridge, XI, 1157
 to change nature of plant, see Mentor chart, Canadian, XV, 988
 cherry, see Cherry
 coffee, XI, 1380; XV, 940
 experiments with cotton, XIV, 1332
 fruit trees, XII, 46; XIV, 1051; XV, 988, 989, 1433
 for hardness, see also Apple, double working, XIII, 88
 insulating tape for use in, XIV, 47
 leaf elimination on, XII, 1198
 mango, see Mango
 manual, XII, 792; XIV, 1051; XV, 1344
 position of scion important in, XI, 715
 to produce pollen at particular time, XV, 1523
 prunes, XI, 39
 strawberries, XI, 1135
 tea, XI, 192; XII, 1504
 tomato, see Tomato
 vines, see Vine
 walnuts, see Walnut
- Gramma growing in Queensland, XIV, 769
- Gransee area, fruit growing in, XI, 381
- Grape, see Vine, grape
- Grapefruit—
 bud selection, XI, 848; XV, 246
 cover crops, XII, 212
 cultivation—
 in Arizona, XV, 784
 of desert, XV, 1198
 in Nigeria, XV, 303
 quality affected by, XII, 212
 grading, XI, 1447
 juice—
 changes during processing and storing, XIV, 1989
 peel oil determination in, XI, 630
 magnesium deficiency influences fruit composition, XII, 1469
 manuring, XII, 208; XIV, 423; XV, 785 1353
 maturity standards, XI, 855
 pruning, XV, 246
 pulp for milk production, XI, 1504
 rootstocks, XII, 323, 994, 1462; XIII, 968
 the Sochi, XII, 992
 storage, XI, 266; XIV, 1383; XV, 2006
 varieties in North Africa, XI, 1304
 vitamin C in, XI, 268; XII, 994; XIV, 1319; XV, 782
 a wild, as rootstock for lime, XII, 1581
- Grapholitha molesta*, see Oriental fruit moth
- Grass—
 for human consumption, XII, 676
 as source of vitamins, XII, 1135
 stop-wash lines to check erosion, XIII, 1504
- Grassland, conversion to market gardening, XIV, 643
- Grease banding, XIII, 441, 442
- Greengage—
 origin of name, XV, 1427
 × peach hybrid, XIV, 489
- Green hellebore, insecticidal properties, XI, 440
- Greenhouse, see Glasshouse

SUBJECT INDEX

Grevilleas as shade for tea, deterioration of, **XIII**, 592

Grewia asiatica, **XI**, 239

Gribovo Selection Station, Moscow, **XV**, 1079

Griffith Irrigation Research Station, work at, **XV**, 369

Groundnut (*Arachis hypogaea*)—

- black spot (*Cercospora personata*), **XI**, 1424
- chemical composition, **XII**, 232
- cultivation—
 - in Burma, **XI**, 1423
 - in Costa Rica, **XI**, (1425)
 - in Georgia, U.S.A., **XI**, 744; **XII**, 576; **XV**, 1349
 - in Mauritius, **XIV**, 1865
 - in N. Carolina, **XIV**, 1864, (1875)
 - in the Philippines, **XI**, 1422
 - in Queensland, **XV**, 306
 - in Union of S. Africa, **XIII**, 567
 - in United Provinces, India, **XII**, 1082
 - in Virginia, **XV**, 1982
- day length and temperature affect, **XII**, 1284; **XIV**, 1105
- irrigation, **XII**, 1013
- machines for husking and shelling, **XI**, 1008; **XIV**, 1867
- manuring, **XV**, 1978-1980
- marketing in Burma, **XI**, 951
- meal properties, **XIV**, 2000
- oil for diesel engines, **XIII**, 1086
- origin and distribution, **XI**, 1351
- pests, **XV**, (599), (1995)g
- products, **XII**, (311)
- proteins, **XII**, 232
- rosette disease, **XIV**, 2017
- seed—
 - coat colour, **XI**, 1145
 - treatment, **XIV**, 1866; **XV**, 1983
- selection for wilt resistance, **XII**, 1081
- varieties—
 - in Arkansas, **XV**, 1981
 - in Virginia and S. Carolina, **XIII**, (1553)
- vegetative propagation, **XIII**, 1548
- vitamin B₁ in, **XII**, 232

Growth—

- affected by—
 - gases, **XIII**, 1125
 - oxygen pressure in nutrient solution, **XIV**, 61
 - pure substances, **XV**, 23
 - soil solution concentration, **XI**, 1071
 - turgor and transport of reserve materials, **XIII**, (1138)
- changes, morphological and biological during, **XII**, 1211
- electrical discharge and plant, **XIII**, 4
- hormone concentration and fruit setting, **XIII**, 480
- inhibition in pea seedlings, **XV**, (1852)i
- inhibitors—
 - from guayule, **XV**, (431)
 - in plant extracts, **XV**, (431)
- measurements, apple, **XII**, 63, 64; **XV**, 1450
- promoters, calcium carbide and ferrous ammonium sulphate, **XII**, 8
- rings and climate, **XII**, 353
- stimulation, various methods, **XIV**, 1021
- studies by observation of tissue cultures, **XIII**, 3
- sub-microscopic, measurement of, **XIII**, (1138)

Growth (continued)—

- in relation to—
 - cropping in apples, **XII**, 392
 - light, **XIV**, 985, 987
 - photosynthesis, **XV**, 1386-1388
 - sexual reproduction, **XII**, 1185
 - soil osmotic pressure and conductivity, **XIII**, 1118
 - soil moisture, **XV**, 960
 - soil salinity, **XV**, 961
- substances, see also Auxin, Growth promoters, Hormones, Heteroauxin—
 - abscission in *Coleus* petioles delayed by, **XIV**, (14)
 - acenaphthene, **XII**, 168
 - acid versus amide, **XII**, 341
 - activity—
 - compared with that of micro-elements and colchicine, **XV**, 427
 - determination, **XIV**, 454
 - of soil bacteria, **XV**, 969
 - addition to soil in pots, **XII**, 1433
 - aneurin, **XIII**, 1124
 - and apple cuttings, **XII**, 1223
 - application in aerosol form, **XIV**, 1273; **XV**, 422, 423, 1490
 - Avena* coleoptile test, **XI**, (347), 1056; **XII**, (765); **XIV**, 1004, (1030); **XV**, (432)
 - and bean, see Bean
 - and blackberry, **XV**, 510
 - and blueberry, see Blueberry
 - boron relations with, in lettuce, **XIV**, 764
 - for bougainvillea, **XV**, 968
 - and bud opening, **XII**, 394
 - in budding and grafting, **XIII**, 46
 - Bureau of Plant Industry's work on, **XIV**, 1462
 - and cacao, **XIV**, 1466
 - and cane sugar, **XI**, 658
 - Carbowax as carrier, **XV**, 426
 - and cauliflower, **XII**, 347
 - chlorobenzoic acids, **XV**, 721, (1406)j
 - chloromethyl-phenoxyacetate, **XV**, 1105, 1106
 - chlorophenoxyacetic acid, **XIV**, 1816; **XV**, 422, 426, 510, 721, 722
 - chlorophenoxypropionic acid, **XV**, 721, 937
 - chrysanthemum and, see Chrysanthemum
 - and cinchona, **XIV**, 1466; **XV**, 1235
 - and citrus—
 - buds, **XI**, 849
 - cuttings, **XI**, 846
 - citrus fruit set not increased by, **XIII**, 1465
 - and coffee, **XI**, 1520; **XV**, 386, 1235
 - colamine, **XIII**, 364
 - colchicine, **XI**, 469, (1067); **XV**, 1403
 - and *Coleus*, **XI**, (347), 1059; **XIV**, (14)
 - comparative activity, **XIII**, 362
 - composition and molecular configuration, **XIV**, 1465
 - and conifer propagation, see Conifers
 - and cosmos, **XII**, 339; **XIII**, (676)
 - and cuttings, Russian work on, **XIV**, 453; **XV**, 19, 20
 - and dahlia, **XI**, (347)
 - for derris propagation, **XIV**, 1466; **XV**, 818
 - determination, light-tight box for *Avena* shadowgraphs in, **XIII**, (367)
 - dichlorophenoxyacetic acid, **XII**, 1182; **XIII**, 362; **XV**, 386, 870, 967, 1487, 1490, 1491, 1810

SUBJECT INDEX

Growth substances (*continued*)—

dichlorophenoxypropionic acid, XIV, 1464, 1762

dihydroxydiethylstilbene, XV, 1809

dinitro-ortho-cresol, XV, 1105

dip treatment, XIV, 1466

in diseased vines, XIV, 1125

for dormancy—

breaking, XII, 349

prolongation, XII, 1012; XIII, 238; 811;

XIV, 85, (193), 292; XV, 805

and Easter lilies, XI, (1300)

ethyl mercuric bromide in connexion with, XI, 337, 658

Eubion, *see* proprietary substances

and evergreens, XIV, 1807

extraction methods, XV, (1406)f

and flower bud initiation, XIV, 1534

flowering affected by, XII, 1183; XIII, 1551; XIV, 85

flowering hormones, XIV, 438, 992, 1001, 1002

4-fluorene acetic acid, XI, 1064

and *Forsythia*, XI, 1055

for frost damage palliation, XV, 1809

fruit bud opening retarded by, XIV, 85

fruit colour increased by, XII, 809

fruit fall retarded by, XI, 735, 1126-1128, 1140; XII, 76-79, 395-397, 754, 805-811, 1156, 1265-1268; XIII, 667, 670, 765-767, 1194-1200; XIV, 522, 1540-1542;

XV, 69-71, 499, 500, 973, 1019, 1487-1492

fruit setting, use in, XI, 1098

fruit set affected by, *see also* parthenocarp, XIII, 775, 1425; XIV, (92); XV, 1809

fungus extracts as, XII, 349

for garden plant propagation, XI, 4

for geranium cuttings, XII, 1399

glycine, XI, 340

and golden rod, XIV, 720

of Group B in plants, XIV, 998

and *Helianthus* seedlings grown in dark, XV, 23

as herbicides, *see also* particular substances, XV, 1105, 1106

heteroauxin, *see also* Heteroauxin, XI, 2, 4, 335, 336, 338, 342, (347), 413, 469, 506, 658, 846, 849, 919, 1060, 1064, (1067), 1267, 1416; XII, 78, 145, 204, 338, 344, 346, 394, 754, 939, 1399; XIII, (33), 46, 203, 362, (367), 518, 673, 1124; XIV, 106, 259, 453, 764, 999, 1000, 1212; XV, 19, 20, 23, (34), 188, 425, 427, 510, 967, 968, 971, 1402, 1404, 1519, 1748

for hop propagation, XIV, 1709

hormodin, *see* proprietary substances

indolylacetamide, XI, 1520

indolylacetic acid, *see* heteroauxin

indolylbutyric acid, XI, 1, 2, 475, 506, 1055, 1064; XII, 171, 172, 346, 394, 754, 1223; XIII, 362, 780, 1210, 1231, 1425; XIV, 105, 106, 226, 453, 454, 720, 1212, 1565; XV, 421, 510, 818, 1439

the influence of substituted groups on effects of, XIII, 1123

inhibition of plant growth by, *see also* dormancy prolongation, XI, (347); XIV, (193), 1533; XV, 967

and *Iresine*, XI, 1059

and *Juniperus chinensis*, XI, 1057

and kok saghyz, XIV, 226

Growth substances (*continued*)—

lanoline emulsion as carrier, XI, 657

and leaf cuttings, XI, 1267

Lemma major reproduction affected by, XI, (661)

and lettuce, *see* Lettuce

levulinic acid, XIV, 1212

liberated by rooting of *Salix* cuttings, XV, 1405

location at time of blossoming, XIII, 382

for *Lonchocarpus* propagation, XV, 818

Lonicera tatarica and, XI, 1, (347)

in maize and its extraction, XII, (765)

and mango, XI, 1416

manual on use, in Russian, XIV, 453

in manures, XV, 1404

and marigold, XII, 339

media for, XI, 657, 1059, (1067); XIV, 1464

methyl indoleacetic acid, XII, 78

movement in *Impatiens*, XIII, 361

and mustard, XI, 659

naphthaleneacetamide, XI, 112, 846, 1520;

XII, 145, 345, 394, 1012, 1268, 1433;

XIII, 518, 766, 767, 1194, 1551; XIV, 226, 453, 720, 1212, 1565, 1785; XV, 499, 805, 818, 1487

naphthaleneacetic acid, XI, 5, 336, 346, 506, 787, 846, 1055, 1064, (1067), 1126, 1127, 1140, 1416; XII, 76, 78, 79, 168, 204, 339, 343, 346, 394, 395, 397, 754, 805, 806, 810, 811, 1012, 1156, 1183, 1223, 1266-1268, 1393; XIII, 362, 518, 775, 1194, 1195, 1198-1200, 1465, 1551; XIV, 85, 226, 453, 522, 720, 775, 1212, 1504, 1533, 1535, 1540, 1542, 1565, 1709; XV, 71, 421, 425, 499, 636, 721, 818, 967, 1106, 1439, 1487, 1490-1492, 1810

naphthalene derivatives, effect on yeast, XIII, 238; XIV, 455

naphthoxyacetic acid, XI, 339; XII, 7, 1267, 1268; XIII, 202, 203, 362, 522, 767, 775; XIV, 226, 720, 1273, 1533, 1553, 1762, 1785; XV, 422, 510, 722, 1810, 1811

naphthyl acids, various, XI, 3, 334, 337, 787, 1059; XII, 809; XIV, 292, 1465

new, XV, (431)

nicotinamide, XIII, 693

nicotinic acid, XI, 340, 341; XII, 339; XIII, 518, (697)

and oats, protoplasmic streaming in, XIV, 1000

oestrone, XI, 1

and onion root growth, XI, 469

and orange cuttings, XII, 204

and ornamentals, subtropical, XI, 1337

and parthenocarp, XI, 475, 1064; XII, 7, 168, 175; XIII, 202, 1425, 1552; XIV, (297), 1504, 1535, 1553, 1762; XV, 14, 721, 722, 937, 1809-1811, 2024

and pea test, XI, (1067); XII, (765)

and pecan—

cuttings, XIV, 1564

fruit set, XIV, 1565

transplanting, XIII, 1231; XV, 931

and penicillin production, XV, 425

phenoxy compounds as, XIII, 366; XV, 424, 1401

phenylacetic acid, XI, (347), 413, 475; XII, 345, 754, 1433; XV, 1738

and physiological activity, XII, 1182

SUBJECT INDEX

Growth substances (*continued*)—
 and pineapple flowering or fruiting, XII, 1183; XIII, 1551, 1552
 and plum—
 budding and grafting, XIII, 46
 rootstock propagation, XV, 1431, 1439
 and pollen growth, XII, 346; XIII, 675; XV, (34)
 pollen from maize as, XI, 1063
 potassium acid phosphate acts as, XI, 658
 and potassium, combined effect of, XII, 145
 and potato seeds and tubers, XII, 342
 powder *versus* liquid form, XII, 338
 practical application, XI, 331
 production during sexual reproduction of plants, XIV, 12
 proprietary substances, XI, 4, 735, 1057, 1058, 1374, 1520; XII, 397, 806, 808, 809, 1156, 1266, 1268; XIV, 172, 1212, 1463; XV, 69, 748, 1489, 1519
 proteins, dissociation of cellular, by, XII, (765)
 pyridine, XI, 340
 pyridoxine, XII, (180); XIII, 693, (697)
 and radish seed, XII, 342, 347; XIII, 673
Rhizopus stinus produces, XI, (1067)
 rootone, *see* proprietary substances
 relation to growth, fruit drop and colour, XII, 754
 response to, affected by organic materials, XII, 755
 reviews of position regarding, XII, 753; XIII, 1121, 1122; XIV, 997, (1030)
 root response to, XIV, 457
 rose—
 propagation with, XI, 506
 shoot development in storage delayed by, XIII, 238; XIV, 292
 and rubber (*Hevea*), XII, 716
 and rust fungi, XIV, (161)
 for seedling roots, XV, 421
 for seeds, XI, 656, 659, 787, (1067), 1208; XII, 342-344, 759, 937, 939, 1393; XIII, 363, 673, 674, 1124; XIV, (14), 1212, 1463; XV, 421, 971
 significance in horticulture, XIV, 11
 soya bean extract as, XII, 348
 and soya bean maturity, XIV, 280
 stilboestrol, XV, 1809
 and strawberries, XIII, 775; XIV, 1553
 and sugar beet, *see* Sugar beet
 and sunflower stems, XI, (1067)
 talc dust as carrier, XI, 1059, (1067)
 from *Taphrina cerasi*, XI, 1170
 and tau saghyz, XV, 188
 and *Taxus* cuttings, XI, 337, 1057
 and tea, *see* Tea
 tetrahydrofurfuryl butyrate, XI, (347)
 thiamin, *see* vitamin B
 thiourea, XIII, 518; XIV, 775; XV, 421, 636
 and tobacco, XII, 939; XV, 636
 and tomato, *see* Tomato
 and transplants, XII, 340; XIII, 1231
 triiodobenzoic acid as, XIII, 365
 and *Tropaeolum majus*, XV, (34)
 for tropical plant propagation, XV, 810
 in tropics, uses of, XIV, 13
 tryptophane as, XI, 1061, 1062; XIV, (458)
 and tung, for prolonging dormancy, XII, 1012
 for vegetable roots, XIV, 172

Growth substances (*continued*)—
 and vegetable seed, XII, 344
 and vine cuttings, *see* Vine cuttings
 and vine grafting, *see* Vine grafting
 in virus-infected potatoes, XII, 1384; XV, (1853)
 vitamin B complex, XI, 6, 340, 341, 345, 469, (737), 1065, 1066; XII, 339, 346, 347; XIII, 72, 518, (676); XIV, 1005, 1467; XV, 1188
 wax bean blossom drop reduced by, XIV, (547)
 wax spray ineffective as, XI, 1060
 xylenoxy acid, XIV, 1003
 yeast extract, *see also* vitamin B, XI, 589; XIII, 1124
 zinc relationship to, XI, 332
 vegetative, relation of seed weight to, XII, 357
 water relations to plant, XIII, 680
 Grubbing, *see* Stumps, removal
Gryllotalpa hexadactyla, XIV, 666
 Guanidine as nitrogenous fertilizer, XV, 412
 Guano industry in Mexico, XIV, 331
 Guatemala—
 (*Tripsacum laxum*) grass for erosion control, XIII, 270
 plant resources, XII, 1017; XIII, 1553
 research work in, XII, 1482
 Guava—
 canning, XIV, 394; XV, 1313
 cultivation—
 in B. Guiana, XIV, 1921
 in California, XIII, 1545
 in S. Africa, XV, 269
 in United Provinces, XII, 1078
 dehydration, XIII, 1062
 fruit spot (*Cephaeleus virescens*), XI, 586
 nutritive value, XIV, 1393; XV, 1313
 propagation, XV, 1228
 pruning, XII, 1152
 vitamin C in, XI, 1495; XII, 1554; XIV, 1404, 1962; XV, 850, 1313
 Guayule (*Parthenium argentatum*)—
 aphis, *Cerosiphia californica*, XV, (1852)m
 Australian investigations, XIV, 1242, 1452; XV, 369, 660, 1348
 auxin in leaves inhibits bud growth, XV, 1748
 a bibliography, XIV, 230
 boron affects, XV, 671
 compared with other rubbers, XIV, 716, 1723
 cultivation—
 in California, XIV, 716; XV, 1744
 in Colorado, XV, 180
 and extraction, XIII, 1540
 in Latin America, XV, 1128
 in Tucumán, XIII, 609
 in U.S.A., XIV, 1721; XV, 1128
 in Western Australia, XIV, 717
 culture, growth inhibitor obtained from, XV, (431), 670
 fructosan, a reserve carbohydrate in, XIV, 1723
 growth phenomena, XV, 1129
 leaf abscission, XV, 1747
 and mariola (*P. incanum*), natural hybridity between, XIV, (1298)
 from Mexico, collection and extraction methods, XIII, 1024
 nematode resistance, XV, 183
 nutrition affects growth, XIV, 1243
 oil spray injury to seedlings, XIV, (1803)
 pests, XV, 1130, 1745

SUBJECT INDEX

- Guayule (*continued*)—
Phytophthora root rot, **XV**, (597)
 pollination, **XV**, 662, 663
 propagation from cuttings, **XIV**, 1722; **XV**, 664
 rubber accumulation affected by temperature, **XIV**, 718
 seed collection, **XIV**, 1721
 seed production, effect of nutrient, photo-period and night temperature on, **XIV**, 229; **XV**, 665
 seedlings, soil moisture and, **XV**, 668, 669
 soil salinity and, **XV**, 666
 splash injury after irrigation, **XV**, 182
 spot disease due to *Ramularia* sp., **XIV**, 1244
 topping and defoliation affect growth, **XV**, 181
 transplants, **XV**, 667
 tissue staining, **XIV**, 2002
 types, **XV**, (431)
Verticillium wilt, **XV**, (597)
 winter hardiness, **XV**, 661
- Guianas, vegetation of the, **XII**, 591
- Guide, use of metal, when budding, **XII**, 1220
- Gulf of Guinea, climatology, fauna and flora of Spanish Territories, **XV**, 933
- Gully control, *see also* Soil erosion, **XII**, 1010, (1270)
- Gum arabic production in Nigeria, **XIII**, 610
- Gumming in plums, *see* Plum
- Gummosis—
 in citrus, *see also* Citrus brown rot, **XI**, 1324; **XIII**, 552
 in stone fruits, **XI**, 1324
- Gutta percha, *Euonymus* spp. a source of, **XIII**, 1388, 1389; **XIV**, 722, 1724
- Guttation—
 fluid—
 effect on pesticides, **XIV**, 1176
 foliage damaged by, **XIV**, 983, 1676
 function of, **XIV**, 981
- Gymnandrosoma* sp., **XII**, 1007
- Gymnosporangium juniperi-virginianae*, **XIII**, 1277; **XIV**, 129, 1137, (1662)
- Gypsum and plant growth, **XV**, 410
- Habitat, importance in fruit breeding, **XI**, 382
- Haematin in plant tissues, **XV**, (972)
- Haemoglobin in root nodules, **XV**, 398
- Hail damage—
 to flax, **XIII**, 1361
 to fruit, **XII**, 102; **XIII**, 91; **XIV**, 1578
 to onions, **XIV**, 1735
 to vines, **XIII**, 1241
- Hairy root, non-infectious, *see* Burrknots
- Halatometer, an atmospheric, **XII**, 1187
- Halotydeus destructor*, **XIV**, 662
- Haloxylon ammodendron*, development in, **XV**, 235, 236
- Haloxylon persici*, **XIII**, 1002
- Hamamelis virginiana*—
 medicinal plant in Tucumán, **XII**, 1583
 an oil plant in U.S.S.R., **XV**, 268
- Haplospheeria deformans*, **XIII**, 821
- Haplopappus* spp. as rubber plants, **XIII**, 1379
- Hardiness—
 breeding for, in U.S.S.R., **XII**, 96; **XIII**, 1146-1151
 of deciduous fruits, winter, *see* Frost resistance
 relation to soil conditions and content, **XII**, 97, 430
- Hardiness (*continued*)—
 tests, apple, **XI**, (779)
 transmission by grafting, **XIII**, 88
- Hardy—
 stocks for apples, *see* Apple rootstocks, frost resistance in
 fruit variety selection in Sweden, necessity for, **XIII**, 725
- Hares, damage from, in N.S.W., **XIV**, 147
- Harvest time forecast from time of blossoming, **XI**, 393; **XII**, 1240, 1241; **XIII**, 57; **XV**, 480
- Harvesting tropical fruits and strawberries, **XV**, 849
- Hashish—derived from *Cannabis sativa*, **XIV**, 944
- Hats, panama, from *Carludovica palmata*, **XII**, 1016
- Havelock North, N.Z., experimental work at, **XII**, 885
- Hawaii—
 Agric. Exp. Stat., Reps. 1940 and 1940-1942, **XI**, 1028; **XIII**, 1632
 dietary, **XIII**, 269
 the home garden in, **XIV**, 363
 soils, **XIV**, (365)
 vegetation zones, **XIV**, (365)
- Hawthorn (*Crataegus* sp.), a large-fruited species, **XIV**, 482
- Hay—
 fever caused by *Ambrosia* genus, **XIII**, (706)
 mulching for apples, **XIV**, 73, 1521
- Hazel nut, *see also* Filbert—
 cultivation—
 in Bulgaria, **XV**, (1535c)
 in Sweden, **XIII**, 416
Monilia or *Sclerotinia fructigena*, **XIV**, 548, 584, 1607
 pollination, **XV**, (1535c)
 pre-storage treatment, **XIV**, 374
- HCN fumigation—
 of citrus, **XII**, 1477-(1480); **XIII**, 560; **XIV**, 312, 857; **XV**, 262, (270), 1210
 of glasshouse pests, **XIII**, 1343
 injury following manganese spraying, **XIV**, 857
 injury in presence of potash deficiency, **XV**, 1168
 insect pests in India, **XV**, 587
 nursery products, **XIV**, 627
 orange fruits and leaves, absorption by, **XV**, 262
 pea weevil, **XIV**, 1953
 temperature in tent affected by, **XV**, (1232)
 of thrips, **XIV**, 137
 of tomato, **XV**, 1168
 toxicity of, **XI**, 376
- Heat, protection against, **XII**, 1071
- Heaters, orchard, *see* Frost protection by heaters
- Heather beetle (*Lochmaea saturalis*), **XV**, (245)
- Hedge—
 clearing, **XIII**, 37
 plants in Northern Nigeria, **XV**, 863
- Helianthus*—
 annuus, *see also* Sunflower
 annuus, leaf petiole structure, **XIV**, (1298)
 seedlings grown in dark, effect of pure substances on, **XV**, 23
 tuberosus, *see* Artichoke, Jerusalem
- Heliothis*—
 armigera, **XII**, (880); **XIII**, 1443; **XIV**, 791; **XV**, (758), 1775
 obsoleta on oranges, **XIV**, 1328
- Heliothrips haemorrhoidalis*, **XI**, 868; **XV**, 1227
- Heliria praealtia*, **XII**, 451

SUBJECT INDEX

- Helix aspersa*, XIII, 563, 564
- Helminthosporium*—
on cowpea and soya bean, XV, 1839
papaveris, XII, 1410; XIV, 219
- Helopeltis* pests—
of cacao, XI, 933
of cinchona, XII, 1047; XV, 298
of tea, XII, (618)
- Hemiptera*—
-Homoptera of cultivated fruits, XII, 124
parasites of, XIV, (1185)
as virus vectors in Swedish potato fields, XIII, (1358)
- Hemp—
bowstring, *Sansevieria*, see *Sansevieria* (*Cannabis sativa*)—
breeding, XIV, 678, (680)
cultivation, XIII, 878; XIV, 201; XV, 622, (1852)c
density of planting, XV, 1714
drugs, the, XIV, 944
fertilizers, potash, trials, XIV, 1691
fibre strengths, XIII, 884; XV, (758)
manganese deficiency, XIV, 679
monoecious, XIV, 1209
seed treatment, XIV, 202; XV, 626
temperatures of soil and air affect, XIV, 1690
varieties in Spain, XV, 1714
- manila (*Musa textilis*)—
decorticating machine for, XI, 316
dry sheath rot, XI, (1365)
growing in Latin America, XIV, 873; XV, 1930
mosaic, transmission of, XI, 185, (1365)
stripping, XI, (1506)
sunn (*Crotalaria juncea*), see Sunnhemp
- Henequen (*Agave fourcroydes*), XIV, 1343
- Hepialus humuli* on stored apples, XIV, 1610
- Herbe condé (*Cordia interrupta*) in Mauritius, XIV, 1444
- Herbicides, see Sprays and spraying, and under particular crops
- Herbs, see also Medicinal plants—
analysis of dried, XV, 333
of the Brooklyn Botanic Garden, XIV, 1224
cooking with, XIV, 1224
culinary, in N. Carolina, XV, 647
diseases and pests, XIV, (290)
for Florida, XV, (758)
growing in Croatia, XIII, 902
growing in England, XII, 316, 902, 1568
seed production, XIII, 136
- Hercinothrips femoralis* host plants, XIII, 1344
- Hereditary factors influenced by environment, XIII, (1138)
- Heteroauxin, see also Growth substances—
and bean, XI, 342, (347); XII, 145
and blackberry, XV, 510
and bougainvillea, XV, 968
and cell and root growth, XIII, (367)
and citrus, XI, 846, 849; XII, 204
and colchicine relations, XI, (1067)
and flower bud opening, XII, 394
for garden plants, XI, 4, 658; XII, 338
for geraniums, XII, 1399
for grafting and budding, XIII, 46
in guayule, XV, 1748
and *Helianthus*, XV, 23
and lettuce, XIII, 518; XIV, 764
for mango, XI, 1416
in manure, XV, 1404
- Heteroauxin (*continued*)—
and onion bulbs, XI, 469
and parthenocarp, XI, 1064; XII, 78
and penicillin production, XV, 425
and photosynthesis, XIV, 999
and plant growth, Chinese work, XV, 427
and pollen growth, XII, 346
and root growth in wheat, XIII, (367)
for rose propagation, XI, 506
for rubber plants, XV, 188
for seeds, XII, 344, 939; XIII, 673, 1124; XIV, 1212; XV, 971
for spruce cuttings, XI, 2, 335, 338
stem inhibition in *Mirabilis jalapa* caused by, XV, 1402
for *Taxus* cuttings, XI, 336
for tea cuttings, XI, 919
and tetraploidy in *Brassica oleracea*, XIII, (33)
for tomato, XIII, 203
for tree cuttings, XV, 19, 20
for tung, XII, 1012
for vine propagation, XI, 413; XIV, 106; XV, 1519
- Heterochromatin, experiments on, XIV, 960
- Heterodera*, see also Nematode, Eelworm—
marioni—
control by soil fumigation, XIV, 661
in glasshouses, XII, (182); XIII, 520; XV, 373
life history and control in S. Africa, XIV, 660
on pineapple, XIV, 360
on potato, XII, 607; XIV, 1685
on rootstocks for deciduous fruit trees, XIV, 1147
on sweet potato, XII, 571
on tobacco, XII, 193; XIII, 588
of tomato, see Tomato
- rostochiensis*, XII, 934
schachtii, XII, (158), 607, 926, 1389; XIII, 158; XV, (758)
- Heterosis—see Hybrid vigour
- Hevea*, see also Rubber (*Hevea brasiliensis*)—
chromosome number in, XIV, (1370)
latex, organic analysis, XII, 304-306
spruceana a rubber rootstock, XII, 638, 1055
- Hexachlorobenzene, acaricidal properties, XV, 589
- Hexenaldehyde in leaves, XI, 1022
- Hibiscus*—
cannabinus a fibre plant, XI, (1370); XIV, 1693; XV, 629, 632, 1243-1245
cuttings of red and white, XV, 1235, 1400, 1441
- esculentus*—
cultivation, XIV, 902
and *H. manihot*, key to differences, XIV, 902
mosaic disease, XIII, 622
pod spot (*Ascochyta abelmoschi*), XIII, 1031
spacing, XIV, 900
- rosa-sinensis*, photosynthesis, XV, (34)
- sabdariffa*—
altissima, stem base disease (*Phytophthora* sp.), XIV, (365)
cultivation, XI, 1364
fibre studies, XIV, 871; XV, 632
spp. fungus diseases, XIII, 1031
- Hillsborough Res. Inst., N. Ireland, A.R. 1940/41-1943/44, XI, (1526); XII, (1584); XIV, 958; XV, (391)

SUBJECT INDEX

Hippophaë rhamnoides source of vitamin, XIV, 1403
History of American agriculture, XII, 314
Hoeing, value of, XII, 1202, 1363; XIII, 181,
(182), 854; XIV, 960; XV, 1095

Holly—
cultivation, XV, (1865)a
cuttings, American (*Ilex opaca*), defoliation
by *Rhizoctonia*, XIII, 244
defoliation checked by α -naphthaleneacetic
acid, XI, 346
leaf miner (*Phytomyza ilicicola*), XIII, (956)
Hollyhock leaf curl, XII, (194)
Homona coffearia on tea, XII, 617
Honduras, plant resources and vegetation, XII,
1018; XIII, 1553

Honey—
composition of Ceylon, XI, (965)
wine, XII, 302

Honeysuckle (*Lonicera periclymenum*) pollination,
XIV, 1305

Hong Kong, bot. For Dep. A.R. Supt. 1940/41,
XII, (723)

Hop—
cultural practice, XIII, 1372
damson aphid (*Phorodon humuli*), XII, 1319,
1397; XIV, 1610
diseases including viruses, XI, 817; XII,
1396, 1397; XIII, 894; XV, 161, 1123,
1720, (1852)s
downy mildew (*Pseudoperonospora humuli*),
XII, 1397; XIII, (164); XIV, 1223; XV,
(598)

drying, XIII, 894

flea beetle (*Psylliodes attenuata*), XII, 1319,
1397

frog hopper (*Euacanthus interruptus*), XI,
1175; XII, 1319

grey mould (*Botrytis cinerea*), XI, 1171;
XII, 1312

growing—
in England, XII, 187, 188; XIII, 894;
XV, 1719

manual in German, XIII, (897)

in New York, XIV, 692

in New Zealand, XV, 383

in Yakima Valley, Wash., XIII, 161

growth substances for propagation, XIV,
1709

meiotic abnormalities induced by atmo-
spheric electricity, XV, (1852)q

nurseries, a plea for, XIV, 1708

pathology, symposium on, XII, 1397

pests, XII, 1397; XIII, 894; XV, 161

a *Phytophthora* disease, XIII, 896, (1374)

Plenodomus humuli disease on, XV, 160

propagation, XIII, 1373; XIV, 1708, 1709

pulling, XV, 1718

quality—

determination, XV, 159

seed affects, XIV, 693

red spider (*Tetranychus telarius*), XI, (1177);
XII, 1397; XV, 1598

research in Great Britain, XV, 1719

resin content, XIV, 209, 693; XV, 158,
(2059)b

root systems on different soils, XIII, 1371

seed germination, alternation of temperature
affects, XIV, 1222

shy bug (*Calocoris fulvomaculatus*), XII,
1397

spacing, XV, 1718

strig maggot (*Contarinia humuli*), XI, 1175

Hops (continued)—

varieties—

Canterbury Golding, seedlings of, XIV,
1221; XV, (227)

merits of different, XIII, 1370; XIV, 692

Nonsuch, XIII, 162

Salmon's new, XI, (1283); XII, 941, 1395;

XIII, 162, 488-490, 895, 941, (982),
(1374)

Verticillium wilt, XII, 1397; XIII, 163; XIV,
966; XV, 1123

viruses—see diseases

yeasts for fermenting straw, XV, 646

Hoplocampa—

flava, XI, 772

testudinea, XIII, 1305; XIV, 1610; XV, 1051

Hormodin, see Growth substances, proprietary
substances

Hormones, plant, see Growth substances

Horseradish—

diseases, XI, 462

polarity in cuttings of, XIV, 1472

Horticultural Abstracts, Index to Vols. I-X, XI, 1510

Horticultural Education—

in England, XV, 947

in U.S.A. State Colleges, XII, 363

Horticultural Research—

in Canada, XIV, 952, 953

in France, XV, 1367

in Germany, XII, 364; XIV, 637

in Great Britain, XII, 1571

in Siberia, the Altai Station, XIV, 461

Horticulture—

in Belgium, XIV, (528)

in England, XIII, 846; XIV, 1439

in Hungary, XIV, 3

in the Netherlands, XIV, (528)

in New Zealand, XIII, 1107; XV, 433

in Queensland, XIV, 1876, 1877; XV, 1339

in South Australia, XV, 434

in Sweden, XIV, (528)

textbooks on, XI, 319; XII, 1562

tropical, in Australia, XIV, 1877, 1878

Host predisposition, water influencing, XV, (598)

Hotbeds—

electric, for vegetables grown in field, XIII,
1341

electrical heating of, XIII, 143; XV, 134, 140

vine marc used for, XII, 838

without straw, XI, 453

Hot water treatment of bulbs, see Bulbs

Hottentot fig (*Mesembryanthemum edule*), XIV,
1717

Howard Spence, his work on walnuts, XI, 1040

Howardia biclavata, XII, 247

Huckleberry, see Blueberry

Humus—

and its application, manual in German,
XIV, (19)

deficiency, economic aspects, XII, 19

and humic acids, XIV, (458)

and soil fertility, XII, (367)

in the tropics, problem of, XIV, 329

wood waste as source ? XII, 1203

Hungary, horticulture in, XIV, 3

Huonville, Tasmania, laboratory at, XII, 1146,
1147; XIII, 1630

Hyacinth—

bulb mites, control, XV, 244

propagation methods, XV, 1189

water, see *Eichhornia crassipes*

Hyaloapteris pruni, XIII, 431, 826

SUBJECT INDEX

- Hybrid vigour—
 in cabbage, XIV, 244
 in cucurbits, XI, (131); XIII, 1416
 a summary of knowledge on, XV, 31
 in tomato, XI, (131); XV, 1163, (1852)v
- Hybridization, graft, Russian work on, XI, 1254; XII, 1209
- Hybrids, graft and chimaeras, XI, 17
- Hydnocarpus* spp. producers of chaulmoogra oil—
 in Ceylon, XIII, 603; XIV, 1351
 in Fiji, XIV, 1909
 in Mauritius, XIV, 1444
- Hydrangea—
 chlorosis diagnosed and cured, XV, 1546
 colour, factors affecting, XIII, 234; XIV, 295
- Hydrogen—
 ions, response of Valencia orange to, XII, 998
 sulphide toxicity, XI, 376
- Hydroponics, *see also* Water cultures—
 meaning of term, XV, 951
- Hygiene—
 in the apple orchard, XIII, 1179
 in the fruit garden, XII, 418
- Hylemyia* spp., *see* Cabbage fly and Onion fly
- Hylesinus oleiperda*, XV, 1608
- Hymenoptera*, parasites of, XIV, (1185)
- Hyponomeutidae* in Spain, XV, 1630
- Hyoscine, corkwood a source of, XII, 1048
- Hyoscyamus*—
niger, inhibitive effects of leaves on flowering, XIV, (1030)
niger, virus disease of, XV, 176
 trials in Queensland, XV, 387
- Hypericum perforatum*, *see* Weeds, St. John's Wort
- Icerya purchasi*, XI, 161
- Idaho agric. Exp. Stat. A.R. 1943/4 and 1942, XV, 1350, (1366)
- Identification of plants, XII, (1217); XIV, (1030)
- Idiocerus* spp. on mango, XV, 853
- Ilex*—
paraguensis, *see* Maté
 spp., *see* Holly and Maté
- Illinoia pisi*, *see* Pea aphides
- Illinois St. hort. Soc. Trans. 1943, XV, 934
- Immortelles, a bark disease of, XI, 963
- Impatiens*—
balsamina, light affects, XI, 358
 hormone movement in, XIII, 361
- Imperial Agricultural Bureaux, their aims and work, XI, 652
- Imperial Agricultural Research Institute, New Delhi, Scientific Reports 1939/40-1940/41, XI, 1515; XIII, (672)
- Imperial Bureau of Horticulture and Plantation Crops, publications of, XI, 330, 1510; XIII, 1099; XIV, 967; XV, 2080, 2081
- Imperial College of Tropical Agriculture, Trinidad—
 A.R. 1940-1944, XII, 335, 1161; XIII, 668; XIV, 1449; XV, 1364
 diseases of field crops, vegetables and fruits, XIII, 1005
 labour management and economics on College Farm, XII, 1498
 manurial experiments, XI, 546
 work of, XI, 544
- Imperial Council of Agricultural Research, India, A.R. 1940/41-1943/44, XII, 1152; XIII, 1094; XV, 379, 380
- Imperial Institute jubilee (1943), XIII, 348
- Inarching—
 citrus, XII, 1147; XV, 1875
 deciduous fruit trees, XI, 41, (737); XIII, 729
- Incas, divine plant of, *see* Coca
- Incompatibility—
 in *Abies concolor*, XV, 1434
 genetic control, XIV, (458)
 in *Linum grandiflorum*, physiology of, XIII, (690)
 pollen tube growth and, XIV, 960
- Indarbela quadrinotata*, XV, 1897
- Index to Horticultural Abstracts Vols. I-X, XI, 1510
- India—
 agriculture and animal husbandry in, XII, 1577
 coffee growing in south, XI, 199; XII, 1506
 Plant Protection Service advocated for, XV, 1237
- Indian crops—
 botany of, publications 1928-32, XI, (608)
 a manual, XV, 1337
- Indian Journal of Horticulture*, Vol. 1, No. 1, XIV, 959
- Indian Tea Association sci. Dep. A.R. 1939, 1941, 1942 and 1940, XI, 1029; XIII, 343; XIV, 419; XV, 1351
- Indicator plants, XII, 734, 751; XIII, 1503; XIV, 969, 1363
- Indium for citrus plants, XIV, 304
- Indolylacetic acid, *see* Heteroauxin
- Indolylbutyric acid, *see* Growth substances, indolyl
- I.N.E.A.C. report for 1940 and 1941, XIV, 2017
- Infiltration determinations, reduction of error in, XIII, (1138)
- Information on Agriculture, sources in Great Britain, XI, 375
- Inga* species, shade trees for coffee, XIV, 1895
- Injections—
 to diagnose and cure, *see also* Deficiencies, mineral, XI, 1110, 1116; XIII, 800-802; XIV, 1111, 1570; XV, 84, 529, 1544, 1545, 1683, 1685, 2081
 tree, XI, 662; XIII, 118, 801, 802; XV, 84
 of vines, apparatus for, XV, 1526
- Inlaying citrus, XV, 1875
- Inoculation—
 cork-borer method improved, XV, (128)
 cross, of legumes, XV, 218
- Insect(s) *see also* Pests—
 air-borne, appraising, XI, 663
 cage for parasites, XV, 1900
 cuticle, permeability to contact poisons, XV, (599)
 and host plants, in Minas Gerais, XV, 1595
 interrelation of plants and, XIV, 430
 pests—
 catalogue of parasites and predators of, XIV, (1185)
 physiology and habits possibly related to plant resistance to pests, XIV, (161)
 physiology, enzyme activity as factor of, XV, 1540
 resistance to insecticides, increase in, XV, 586
 resistance of plants to, related to insect physiology, XIV, (161)
 seen in England, XII, 1319; XIII, 1284; XIV, 1610; XV, 1594
 toximeter, XIII, 126
 vectors of plant disease, *see* Virus vectors

SUBJECT INDEX

- Insecticidal—
 plant products, XI, 1191; XIV, 1181
 plants—
Aconitum, XIV, 1657
 of America, XV, 1597
Amorpha fruticosa, XIV, 1183
Anabasis aphylla, XIV, 634
 barbasco, XIV, 1341, 1342
 from British Empire, XI, 85
 castor bean not an, XIV, 632
Celastrus spp., XIV, 1657
 Chinese, XIV, 1657
Delphinium delavayi, XIV, 1657
 Derris, *see* Derris
Duboisia hopwoodii, XIV, 1659
 evaluation of, XII, 1342
 fish poison plants, XI, 180; XIII, 577
 in Guatemala, XII, 1029
Lonchocarpus—*see* *Lonchocarpus*
Mammea americana, XV, 1238
Milletia ferruginea and *M. pachycarpa*,
 XIII, (578); XIV, 1657
Pachyrhizus spp., *see* Yam bean
Palaquium spp., XIV, 1657
Phytolacca acinosa, XIV, 1657
 pyrethrum, *see* Pyrethrum
 in Russia, XIV, 975, 1661
Schoenocaulon drummondii, XV, 1363
Spilanthes acmella, XV, 1653
Tephrosia spp., *see* *Tephrosia*
Thevetia nerifolia, XIII, 127
Tripterygium spp., XI, 438; XIV, 1657
 in Tucumán, XII, 1583
 in Venezuela, XIII, 577
Veratrum viride, XI, 440
- Insecticides, *see also* Sprays and spraying—
 bands chemically treated, XIV, 601
 a catalogue, XIV, 615
 contact, mode of entry, XV, (1658)t
 contact poisons, mode of action of, XIV,
 (1184)
 dust, explosives for spread, XIV, 1642
 effect of guttation fluid on, XIV, 1176
 inert dusts, action of, XIV, 622, 1175,
 1647
 progress in, XV, 1633
 tobacco smoke, XIV, 603
 toxicity, enzyme activity a factor in deciding,
 XV, 1540
- Institut national pour l'étude agronomique du
 Congo belge (I.N.E.A.C.) Rep. 1940 and
 1941, XIV, 2017
- Institutes, *see also* particular institutes and types of
 institute—
 Grain Husbandry, of south-eastern S.S.R.,
 XV, 1368
 Inter-American, in Costa Rica, XIII, 268;
 XV, 1233
 Physico-Agronomical, in Molotov Provinces,
 Urals, war work, XV, 1369
- Inter-American Institute of Agricultural Sciences,
 Turrialba, Costa Rica, XIII, 268; XV,
 1233
- Intercropping—
 citrus orchards, XV, 1871
 fruit plantations, XV, 491, 1456
- Invertase as measure of soil nitrogen, XI, 688
- Iodine—
 oil in oil seeds affected by, XII, (1412)
 and plant nutrition, XII, 28
 for potato scab control, XII, (158)
 in vegetables and water, XI, 379
- Ion—
 absorption, O, importance in, XIV, 1012
 availability in plant nutrition, XI, 689
- Iowa agric. Exp. Stat. A.R. 1939/40-1943/44, XI,
 1030; XIV, 420, 1440; XV, 1352
- Ipecacuanha root (*Cephaelis ipecacuanha*), XII,
 589; XV, 844
- Ipu nui (*Lagenaria siceraria*), XIII, 1030
- Iran flora, investigators, XV, 1372
- Iresine* spp. propagation by cuttings, XI, 1059
- Iridaceous plants, mosaic diseases of, XIV, (1816)
- Iridomyrmex humilis*, XII, 1475; XIII, (562);
 XV, 103, 570
- Iris—
 bearded, in Texas, XIII, (541)
Botrytis crown rot, XI, 1295; XV, 771
 Dutch, nutritional experiments, XI, 135
germanica, vitamin C content, XIV, 1400
 seed germination difficulties, XIV, 1805
- Irish moss (*Chondrus crispus*), use in foods, XV,
 (2059)f
- Iron—
 deficiency, *see* Deficiency symptoms, iron
 -manganese relation in plant metabolism,
 XIII, 226; XV, 536, 1919
 in plants, XII, (367); XIII, (375)
 pineapple growth and ash constituents
 influenced by, XIV, 899
 wood (*Ostrya virginiana*) seeds, XIII, (697)
- Irradiation—
 effect of intermittent, XIV, 987
 of seedlings, XI, 679
- Irrigated soil—
 effect of fertilizers and soil amendments on,
 XV, (1406)a
 pH of orchard, XII, 84
- Irrigation—
 in Algerian orchards, XIV, 1530
 apples, *see* Apple
 Area, Murrumbidgee, XIV, 78, 465
 artesian wells for, XV, 1359
 avocado, XII, 582
 banana, overhead, XII, 1089
 of cabbages and cucumbers in Moscow
 district, XV, 1772
 citrus, *see* Citrus
 climate affected by, XIII, 705
 current meters to measure pipe discharges,
 XV, 10
 deciduous fruit tree, XI, 54, 1121; XII, 403;
 XIII, 396, 754, 1098, 1192; XIV, 78, 516,
 517, 519, 1530, 1531; XV, 63, 1005, 1359
- farm—
 in England, XII, 1201
 and orchard in Queensland, XIV, 517
 for field crops in California, XIII, 754
 groundnut, XII, 1013
 leaf diagnosis in relation to, XIII, 222
 for market gardens in England, XV, 605
 in the Middle East, XV, 938
 overhead, fungicides included in, XV, 1100
 pear, XII, 825
 potato, *see* Potato
 prune, XII, 404
 salt accumulation under, XIII, 784
 in Sind, XV, 813
 of small fruits, XIV, 529
 for S. Australia, XIV, 1531
 of strawberry, XIV, (1567); XV, 486
 subsoil, XIV, 518
 subterranean water used for, XI, 693
 sweet potato, XII, 570

SUBJECT INDEX

- Irrigation (*continued*)—
 of vegetables, XV, 486, 1084, 1348, 1694
 vine, *see* Vines
 water—
 composition in Guyo zone, Argentina, XV, 1377
 measurement, XII, (39); XV, 250, (432)
- Irrigators, auto-, XII, 767; XIII, 699; XV, 2, 3
- Isariopsis fuckelii*, XII, 447; XIV, (1184)
- Isatis tinctoria*, XV, 1127
- Isil'kul nursery, XIV, 45
- Isolation boxes, plant, XI, 361
- Isopoda*, parasites of, XIV, (1185)
- Isoptera*, parasites of, XIV, (1185)
- Ivory, vegetable, from *Sclerosperma manii*, XV, 271
- Ivy, poison (*Rhus toxicodendron*) control, XII, 883; XIII, 1306
- Jaboticaba (*Myrciaria cauliflora*), effect of freeze on, XI, (965)
- Jack-bean (*Canavalia ensiformis*), food value, XIV, 364, 1424
- Jack fruit (*Artocarpus integrifolia*), food value of seeds, XIII, 1509
- Jakovlev's work, XII, 1209
- Jak tree (*Artocarpus integer*) resin, XI, 313
- Jam—
 adulteration detection, XII, 1545
 manufacture in wartime, XII, 1131, (1142); XIII, 1611
- Jamaica—
 Dep. Agric. A.R. 1939/40, 1940/41, 1942/43 and 1943/44, XI, 1031; XII, 1153; XIV, 2022; XV, 1353
 memorandum on agricultural development, XIV, 1340
 vegetation of, XIII, 1553
- Japan, agriculture in, XIV, 976
- Japanese—
 beetle, *see* Beetle, Japanese
 persimmon, *see* Kaki
- Jatropha curcas*, the physic nut, XI, 572
- Java jute, *see* *Hibiscus sabdariffa*
- Java, new crops for East, XII, 596
- Jelly making—
 domestic, in Canada, XIII, 1611
 from Indian fruits, XII, 688
- Jelutong or pontianac, XI, 314
- Jodrell laboratory, Kew, work of, XIV, 1669
- John Innes—
 composts and soil sterilization, XI, 654, 1508; XII, 350; XV, 16, 17, 18, 462
 Institution A.R. 1940-1944, XI, 1032; XII, 712; XIII, 665; XIV, 960; XV, 935
- Journal of Jamaica Agricultural Society, reprints, XI, 911
- Juglans*, *see also* Walnut—*mandshurica* in Far East of Russia, XIV, 111
- Juice—
 apple, *see* Apple
 apple-raspberry, XI, 991
 apricot, XIII, (335)
 asparagus, XV, 1319
 black currant, XI, 992
 blueberry, XII, 1156
 calamondin, XIV, (1875)
 cherry, *see* Cherry
 citrus, *see* Citrus, Orange juice, *etc.*
 clouding and sedimentation, XIV, 1986
- Juice (*continued*)—
 concentrates, XI, 628; XII, 1115-1118; XIV, 937, 1410, 1987, 2025
 concentration methods, XI, 994
 fruit—
 barrels—methods of tapping, XV, (2059)
 buffering effect of, XIV, (2003)
 CO₂ absorption capacity, XII, 678; XV, 348
 extraction plant, XV, 1318, 2042
 and jellies, recipes for home use, XIII, (1087)
 manual, German, XII, (1536)
 manufacture and storage technique, XI, 623, 624, 988, 1466, (1506), 1525; XII, 678; XIII, 1077; XIV, 1411; XV, 2042
 micro-organisms and, XV, 897
 mixed, XI, 99, 995
 monochloroacetic acid in, XIV, (1431)
 preservation, XI, 988; XII, 678; XIII, 652, 1070; XIV, 1411, 1988
 preservatives, XII, 1551
 production—
 in Canada, XI, 1466, 1525
 in England, XI, 623, 624
 in Esthonia, XV, 1317
 in Sweden, XIII, 1072; XV, 2042
 in Switzerland, XI, 988; XII, 678, 1162; XIV, 1411, 1441; XV, 2044, 2045, 2079
 in U.S.A., XI, (1506), XIII, 1077
 residues, use of, XIV, 390
 SO₂ determination, XII, (295)
 vinegar from, XIII, 1608
 vitamin C in, XII, (295); XIV, 1408; XV, 327, 2043
 grape, *see* Vine, grape
 grapefruit, *see* Grapefruit
 moulds in fruit and grape, XV, 2046
 orange, *see* Orange
 pasteurization, flash, of orange, XI, (641)
 peach, XIII, (335)
 pineapple, XII, 715, 1147
 prune, *see* Prune
 quince, XII, 790
 from small fruits, XIII, 1077; XIV, 1411
 swede, XII, 1118
 tangerine, XIV, 941
 tomato, *see* Tomato
 vegetable, *see* Vegetables
- Jujube (*Zizyphus jujuba*)—
 cultivation in Punjab, XI, 238; XIV, 1367
 nutritive value, XIV, 1393
 variety trials at Lyallpur, XI, 1433
- Juniper as source of sugar, XIV, 1086
- Juniperus*—
 chinensis, growth substances and, XI, 1057
 turcomanica oil for microscopy, XV, 356
- Jute (*Corchorus* spp.)—
 for coffee bags, XV, 1241
 cultivation—
 in Bengal, XII, 1030
 in Colombia, XIII, 1508
 in Tucumán, XII, 1031
 photoperiod affects, XV, 821
 stem rot, XIII, (1553)
 stem weevil (*Apion corchori*), XV, 1242
- Jute, Java—*see* *Hibiscus sabdariffa*
- Jute substitutes—*see* *Urena lobata*
- Juvenile and mature forms of fruit trees, XIV, 1505
- Kaki (*Diospyros kaki*)—
 growing—
 in Brazil, XI, 1347

SUBJECT INDEX

- Kaki growing (*continued*)—
 in Europe, XIII, 44
 in Italy, XII, 789
 in the Punjab, XI, 1338
 leaf stomata, XI, 888
 nutritive value, XIV, 1393
 research in California, XIII, 987
 rootstocks, XIV, 1335
 tannin cell, varietal differences in, XIII, 56
 vegetative propagation methods, XIII, 48
 vitamin C in, XI, (291)
- Kalanchoe blossfeldiana*—
 artificial lighting and, XV, (432)
 flowering hormones in, XIV, 438
- Kale—
 cultivation, XIII, 917, 918
 nutritive value, XII, 961
 varieties, Hungry Gap, XII, 166
- Kallar fruit station, XI, 1033; XIV, 961; XV, 936
- Kapok (*Ceiba pentandra*)—
 pod borer (*Mudaria variabilis*), XII, (1518)
 vegetative propagation, XI, 1363
- Kapulasan (*Nephelium lappaceum*) growing in the Philippines, XI, 1419
- Kapuskasing agric. exp. Stat. Rep. 1936-40, XIII, 663
- Kaščenko, N. F., life and work, XIV, 30
- Katabatic winds and frost, XV, 1554, 2080
- Kazah—
 agric. Inst., horticultural projects, XIV, 462
 State University, Botanical Faculty, XV, 29
- Keiferia lycopersicella*, XIV, 267, 1781
- Kelsey spot and bitter pit, analogy between, XII, 58
- Kenaf, *see Hibiscus cannabinus*
- Kerosene as weed killer, XIV, (1803); XV, 1103, 1703
- Ketchup, tomato, XI, 637
- Kew Gardens—
 centenary, XII, 724
 in war and peace, XIV, 427, 1669
- Kigelia*—
aficana, movement of solutes in, XI, 908
pinnata, movement of solutes in, XIII, 1632
- Kilns for drying fruit, XV, (2011)c, 2034
- Kitchen waste, agronomic value, XII, 1205
- Kizimbani Exp. Stat., Zanzibar, A.R. 1943, XIV, 1454
- Koa haole, *see Leucaena glauca*
- Kodachrome transparencies, use in illustrations, XV, (432)
- Kodur fruit research station, XI, 1033, 1034; XIV, 961; XV, 936
- Kohlrabi—
 boron deficiency, XII, 1424; XIV, 756
 cultivation methods, XII, 494
 as source of vitamin C, XII, 702
- Kok saghyz (*Taraxacum kok-saghyz*)—
 breeding, XII, 1061
 clump sowing, XV, 672
 compared with other rubber plants, XIII, 173; XIV, 889
 cultivation—
 in Australia, XIV, 1242; XV, 369, 1348
 in Canada, XV, 925
 in Florida, XV, 931
 in Great Britain, XIII, 174, 1378
 in New Zealand, XIII, 500; XIV, 225
 in Russia, XII, 1060, 1062, 1063, 1065; XIII, 1380; XIV, 974, 2029; XV, 673
 in Washington State, XIII, 671
 diseases, XIV, 1436
- Kok saghyz (*Taraxacum kok-saghyz*) (*continued*)—
 flagellates of, XIV, 721
 growth substances help in propagation, XIV, 226
 a leaf spot (*Xanthomonas taraxaci*), XIV, 228
 eelworm pests, XIII, 1383
 latex vessel development in, XII, 1415; XV, 184, (227), 1749
 leaf morphology, XIII, 501
 manuring, XIII, 1381; XIV, 719; XV, 1135
 nutrition, XIII, 504; XV, 1136
 phosphatic nutrition, XIII, 503
 photoperiod and temperature effects on, XIV, 227
 pollination, XII, 1417, 1418; XV, 674
 popular account of, XII, 1413; XIII, 1378
 radioactive elements in nutrition affect, XIII, 502
 roots, anatomical structure, XV, 1137
 rotations to include, XV, 1133
 rubber—
 content, XII, 1065, 1067, 1416; XIII, 1382; XV, 1750-1752
 synthesis in, XV, 1138-1140, 1142
 rust (*Puccinia taraxaci*), XV, 675
 seed—
 germination stimulation, XIII, 904
 pest control, XIV, 1241
 summer rest period, XII, 1066
 tetraploidy—
 affects, XV, (431)
 induced in, XII, 1414; XV, 1131
 trace elements in, XV, 187
 vegetative propagation, XII, 1064; XIV, 226; XV, 186, 1132, 1134
 yellows, XV, 190
- Koroseal gas-tight fabric, XIII, 1482
- Krasnodar, flora of, XV, (34)
- Kremenskaja field station, XIII, 708
- Krym saghyz (*Taraxacum megalorrhizon*)—
 cultivation, XIII, 1378; XIV, 2029
 latex vessel system, XV, (227)
 rubber content, XV, 1752
 vegetative propagation, XV, 186
- Kudzu (*Pueraria thunbergiana*) propagation, XII, 1501; XV, 1918
- Kumara cultivation in New Zealand, XII, 329
- Kumaun, propagation of apple at, XI, 1101
- Kweme nut (*Telfairea pedata*), XI, 590
- Lablab, *see Dolichos lablab*
- Labour—
 costs, English, in wartime, XIV, (1476)
 economics in Trinidad, XII, 1498
 Lactoflavin determination, XIV, 925
 Ladybird (*Coccinella septempunctata*) to control woolly aphid, XV, 1601
- Lagenaria siceraria*, XIII, 1030
- Lagunas, a centre of barbasco production, XIV, 1342
- Lampetia equestris*, XIV, 1813
- Lampronia capitella*, XII, 1319
- Land—
 classification for agricultural purposes, XV, 1395
 in Sumatra, uncultivated, suggestions for use, XII, 1499
- Landolphia* spp., rubber plants, XII, 1068; XIII, 1025, 1541; XIV, 716, 889
- Lanolin as growth substance carrier, XI, 657
- Lanthanum in pea nutrition, XIII, 535

SUBJECT INDEX

- Laphygma frugiperda*, XII, (880)
 Larkspur, virus diseases of, XIII, 951
Lasioderma serricorne pest of stored tobacco, XII, 1539
Laspeyresia nigricana, XIII, (1572); XIV, (1298)
 Latex preservation, XII, 1556
 Latin America, plants and plant science in, XV, 2069
Lauraceae of Venezuela, XV, (1298)
 Lausanne Research Station Reps. for 1939-1940 and 1941-1942, XII, 1154; XIV, 1441
 Lavender cultivation in Argentina, XI, 495
 Lawn—
 cultivation, XII, 199
 mowings as pig food, XIII, (1138)
 Laxatives, fungi as, XV, (1852)r
 Laxtonberry, description and selection, XI, 58
 Lay out, *see also* Experiments—
 of experiments—
 field trials—
 in Puerto Rico, XV, (1995)d
 in S. Africa, XIV, 1458
 fruit plots, XIV, 32
 under glass, XIV, 184
 lattice squares, XV, (34)
 vegetables, XIV, 165
 of private fruit garden, XIV, 33, 1477
 Layering—
 pecans, XI, 742
 plum—
 and cherry rootstocks, XII, (383)
 rootstocks, XII, 1225; XV, 1431
 propagation methods, XIV, 967; XV, 1431
 Leaf—
 abscission mechanism, *see* fall
 analysis, *see also* diagnosis—
 of cane fruits, XV, 509
 as guide to soil sterility, XIII, 372
 pecan, XIV, 113
 in rubber, XI, 1406
 area—
 measurement devices, XII, 773-775
 in plum and fruit composition, XIV, 1510
 beets and spinach, XIII, 1404
 buffer values of various, XIV, (1030)
 chlorophyll-protein compound of green, XIII, 1129
 decomposition of forest, XIV, (458)
 diagnosis, *see also* analysis—
 citrus, XIV, 1826-1828
 electro, XI, 352
 guide to manuring required, XII, 816; XIV, 4, 1512; XV, 1167, 1479, 1480
 nitrogen content, XII, 1252
 in relation to irrigation, XIII, 222
 and soil heterogeneity, XII, 178
 in strawberry, XIV, 554
 in sugar cane, XV, 825
 in tomato, XI, 477; XII, 178; XV, 1167
 enzyme system of apple, XII, 1237
 excised, assimilation and respiration of, XI, (31)
 extract, spectrograms of, XI, 350, 668
 fall—
 apple and pear grouping according to, XI, 398
 mechanism, XII, 741
 in citrus, cause of excessive, XII, 1000
 growth affected by light, XII, (367); XIII, (20)
 hoppers (*Hemiptera-Homoptera*)—
 of fruit, XII, 124
 injury, photosynthesis and transpiration, XIII, 112
 of Minnesota, XV, (599)
 of vine, XII, 126
 inhibitive effects on flowering, XIV, (1030)
 injections, *see* Injections
 measurement, XII, 67; XIII, 1495
 morphology—
 and growth in apple, XV, 477
 thermal balance and, XIV, 439
 painting for deficiency diagnosis and cure, XV, 1546
 pigments, XI, 1022
 protein manufacture, XII, 1550
 removal affects growth in sugar beet, XV, 148
 roller, fruit tree (*Cacoecia argyrosipila*), XII, (462)
 rust of deciduous fruits (*Puccinia prunispinosae*), XIV, 563, 1142
 scorch in apples, XII, 1250
 structure modified by nutrients, XIV, 1686
 surface, relative humidity of, XIV, 1471
 temperature measurement, XII, 1175
Lecanium corni-crudum, XIV, 1815
 Leek—
 the Egyptian, for English growing, XII, 488
 pest (*Acrolysis asceltella*), XV, 944
 weed control by sulphuric acid, XIII, 513; XIV, 744
 Legislation, *see also* Regulations, Certification, etc.—
 on insect pests in Ceylon, XV, (1995)b
 Legumes—
 in Algeria, production of dried, XV, 1078
Leguminosae—
 alkaloids of, XIV, 1239
 cross inoculation groups, XV, 218
 cultivation, XIII, 939
 family, XV, 1917
 root nodules of, XIII, 1120
 seed inoculation, XIII, 942, 946
 for tropics, XII, 1027
Lemna as test organism for nutritional tests, XIV, 1015
 Lemon—
 artificial colouring, XIV, 1387
 boron in nutrition of, XIV, 841
 brown rot control, XI, 1326
 California red scale, productivity on, XIV, 1845
 copper injury, XI, 1326
 cuttings, XI, 514; XV, 969
 decline, XIV, 1825; XV, 1877
 drought resistance, XIV, 1120
 Eureka, anatomy and histology, XIII, (545)
 frost—
 damage and repair, XII, 1467
 protection—
 by topworking on tangerine, XI, 858
 by training low, XI, 1316
 growing—
 in Ceylon, XII, 551
 in N. Zealand, XIV, 1819
 growth, soil temperature and moisture affect, XIV, 838
 irrigation problems, XV, 1877
 leaf transpiration, XI, 515
 Nectria cancri aurantii on, XII, 217
 phosphorus in nutrition, XIV, 841
 picking, XV, 788

SUBJECT INDEX

Lemon (*continued*)—

- propagation, vegetative, *see also* cuttings, XI, 851
- radiation and sulphur injury to, XV, (431)
- roots, effect of chilling, XIV, 838
- rootstocks, XI, 851, 858; XIV, 1825
- soil moisture needs, XII, 583
- storage—
 - life affected by emanations from *Penicillium*, XI, 1456
 - methods, XI, 267
 - rooms, ethylene in, XIII, 627, 628
 - topworking on tangerines, XI, 858
 - vitamin P in, XI, (1506)
- Lenin Academy of Agricultural Sciences, meeting of directors of institutes of, XV, 948
- Leonurus* spp., medicinal plants, XV, 655
- Lepargyrea argentea* a source of vitamin C, XIII, 408
- Lepidosaphes beckii*, XIII, (562)
- Leptinotarsa decemlineata*, *see* Colorado beetle
- Leptoglossus gonagra*, XI, 1328
- Leptospermum citratum*—
 - cultivation, XII, 1043, 1044
 - source of oil, XV, 168
- Leptosphaeria coniothyrium*, XIV, 586
- Leptothyrium pomi*, XII, 441; XV, 95
- Lesser Antilles, plant resources of, XII, 592, (595)
- Letodiplois* midge in stored seed, XIV, 1954
- Lettuce—
 - boron: indoleacetic acid relations, XIV, 764
 - Botrytis* disease, XI, 111; XII, 964
 - cabbage looper (*Autographa brassicae*) pest of, XIV, 1750
 - classification, XII, (500)
 - diseases, XIII, 860, 1410; XIV, 1436; XV, 1778
 - downy mildew (*Bremia lactucae*), XII, 964; XIV, 1749
 - fertilizers and manures, *see* nutrition
 - under glass, XI, 449, 450
 - grey mould (*Botrytis cinerea*), XII, 964
 - growing—
 - in Bristol province, XI, 805
 - in British Columbia, XII, 167
 - Cheshunt recommendations, XII, 1575
 - under glass in Lancashire, XV, 1154
 - in pots, XII, 497
 - in Queensland, XIV, 761
 - growth substances and, XI, 659; XIII, 518; XIV, 764
 - infra-red light affects, XV, 395
 - leaf spot (*Septoria lactucae*), XII, 270
 - molybdenum for, XII, 499
 - nutrition, XII, 498, 1425; XIII, 193-195; XIV, 764, 1747
 - packing and shipping, XI, 280
 - ring spot (*Marssonina panattoniana*), XIV, 1263
 - root aphid (*Pemphigus bursarius*), XIII, 1411
 - seed—
 - colour inheritance, XIII, (1412)
 - driller and fertilizer distributor, XIII, 193
 - germination of dormant, XIV, 762, 763; XV, 699
 - viability, storage conditions and, XIII, 1409
 - seedlings, growth substances and, XIII, 518
 - soft rot (*Sclerotinia minor*), XV, 1155
 - soil treatment with chloropicrin, XIII, 194
 - spotted wilt, XV, 1778

Lettuce (*continued*)—

- varieties—
 - Cheshunt, XV, 1154
 - crisp-head, XV, 700
 - Great Lakes, XIII, 921
 - in Scandinavia, XIV, 636
 - in U.S., the Imperial, XIII, 191
 - winter, XII, 1357; XIII, 1339
- vernalization, XIII, 192, 517, 1630
- virus—
 - aster yellows, XIV, 1748
 - big vein, XV, 701, 702, 1779
 - mosaic, XV, 703
 - which attacks dandelion, XIV, 1262
 - yellows, XI, 806
- in water culture, XIII, 204, 205
- Leucaena*—
 - glauca*—
 - and baldness, XI, 960
 - seed, increasing germination in, XIV, 333
 - spp.—
 - shade trees, XI, 1384; XV, 280
 - as source of wood, XI, 202
 - varieties, notes on new, XI, 203
- Leveillula (Oidiopsis) taurica*, XV, 1175
- Levelling device, home-made, XII, (39)
- Levulinic acid, a growth substance, XIV, 1212
- Libidibia coriaria*, source of tanning material, XII, 1016
- Library organization at Tucumán research station, XIV, 978
- Libya, olive growing in, XIV, 470
- Licania rigida*, *see* *Oiticica* nut
- Lichens, XIV, (458)
- Licuriseiro (*Cocos coronata*), XII, 1085
- Light and Lighting, *see also* Photoperiod—
 - artificial—
 - C/N metabolism affected by, XI, (1069)
 - environment influences, XI, 1215
 - time of application influences, XI, 476
 - types of lighting influence, XII, 394
 - of *Kalanchoë blossfeldiana*, XV, (432)
 - neon, for tomatoes, XV, 717
 - excessive, effect on tomato, XIII, 210
 - flowering affected by, XI, (1300); XII, (18)
 - growth—
 - affected by different coloured, XIII, (20)
 - relations and, XII, 17; XIV, 985, 987
 - infra-red, effect on lettuce, XV, 395
 - intensity affects ascorbic acid in turnip greens, XIV, 996
 - inhibition of internode in *Avena*, XI, (1073)
 - and pigment in kidney bean, XV, 745
 - and prostrate habit, XI, 678
 - recorder—
 - for field use, XIII, (375)
 - an integrating, XI, 1073
 - response affected by intermittent irradiation, XIV, 987
 - and seed life, XII, 16
 - stem and leaf in pea affected by, XI, 359
 - sugar beet affected by continuous, XII, 481
 - supplemental, effects on flower and berry production in potato, XII, (1390)
- Lightning—
 - injury to tomato, XII, 511
 - struck trees, survey of, XIV, 1580
- Lignin in citrus woods, XIII, (260)
- Ligusticum scoticum*, virus disease of, XIV, 1710
- Ligustrum japonicum* berries as poultry food, XIII, 538

SUBJECT INDEX

- Lilac**—
cultivation, propagation, pests and diseases, XI, 1291
forcing by injury, XIV, 456
- Lilium**—
longiflorum, see also Lily, Easter—
cultivation in Brazil, XV, (774)
var. *eximium*, see Lily, Bermuda
regale, parthenocarp induced by growth substances, XIV, (297)
- Lily**—
Asiatic, minor species of, XV, 1863
Bermuda, development in, XI, 1298
Croft, fumigation, XIV, (1816)
Easter—
black scale disease, XIV, (1816)
bulb treatment, XIII, 955
forcing, XII, 546, 547
growth substances and, XI, (1300)
storage of bulbs, XI, 1299, (1300); XII, 1459; XIV, (297)
Fusarium scale rot, XV, 770
virus diseases, XIV, (1816); XV, 242, (774)
- Lime**—
composition, seasonal variation in Persian, XI, (1012)
flavouring oil from Persian, XIV, 1995
industry in Florida, XI, 873
juice, vitamin C content of preserved, XIV, 401
Persian, analytical studies of, XV, 776
rootstocks for, XII, 1581; XIII, 546; XIV, 837; XV, 776
seedless, Tahiti, propagation, XIV, 837
sweet, propagation methods, XV, 1874
trees (*Tilia*), root terminal nutrition, XIV, 1028
weed (*Polygonum nepalense*), XIV, 1891
West Indian, rootstocks for, XIII, 546
- Limes Association**, West Indian, XI, 1302
- Limestone**, dolomitic, effect in complete fertilizers, XIII, (23)
- Liming**—
affects—
mosaic in tomato, XIII, 1431
phosphorus transformation in acid soils, XIII, 1007
vitamin C content in vegetables, XI, 784
in Scotland, a plea for revival, XII, 365
soft fruits, XIII, 412
- Limonium agonus** control in tobacco, XIV, 207
- Linseed**—
cultivation—
in England, XIII, 498
in New South Wales, XV, 1733
in New Zealand, XIII, 1376
in tropics, XII, 608, (609)
improvement in United Provinces, XV, 296
manuring, XII, 528
seed treatment, XIII, 1377
- Linum**—
fibre and oil production of different forms of, XII, (1412)
grandiflorum, physiology of incompatibility in, XIII, (690)
- Lipid**, determination of crude, XV, (1336)
- Lipositol** in soya bean, structure of, XIII, (702)
- Liquids**, flow of, XIII, 1308
- Liquorice** trials in Queensland, XV, 387
- Lisbon market gardens**, XIV, 162
- List of bulletins** published by U.S. Agricultural Experiment Stations 1939-1942, XII, 733; XIV, 2015
- Listroderes obliquus**, XIV, 1707
- Listronotus latiusculus**, XII, 1420
- Litchi** (*Nephelium litchi*)—
cultivation in India, XI, (1420)
growing for United Provinces, XII, 1080
- Lithium salts** as plant prophylactic, XI, 1075
- Little leaf** in fruit and nut species and in vines, XI, 421, 753, 882, 948, 1149; XII, 999, 1299, 1468; XIII, 295, 1225, 1246, 1247, 1632; XIV, 563, 1575, 1576; XV, 534, 535, 791, 930, 1202, 1204, 1544, 1548
- Liverwort**, effect of colchicine on, XI, 660
- Lobelia inflata**—
cultivation, XV, 175
pollination, XIV, 1306
- Lochmaea saturalis**, the heather beetle, XV, (245)
- Locust**, the black (*Robinia pseudacacia*)—
as pasture tree, XII, 735
borer (*Cyllene robiniae*), XII, (988)
- Locust** (pest) control, XI, (1178); XII, (235); XIII, 572
- Loganberry**—
cultivation in England, XI, 1132
description and selection, XI, 58
training and spraying, XI, 79
- Lonchocarpus**—
nicou—
cultivation, XIII, 577; XIV, 1341, 1342
dust to control cabbage white butterfly, XI, 789
rotenone in, XV, (1658)q
urucu, XIII, 577
vegetative propagation with help of growth substances, XV, 818
- Long Ashton Research Station**—
A.R. for 1943, XIV, 2024
origin and war work, XIV, 969
- Long day plants**, see Photoperiodism
- Lonicera**—
periclymenum pollination, XIV, 1305
atarica, growth substances for cuttings of, XI, 1, (347)
- Loofah sponge** (*Luffa aegyptiaca*), see also *Luffa*, XIV, 252, 1756
- Lophobaris piperis**, XI, (248)
- Lophosternus hugelii**, XII, 452
- Loquat** (*Eriobotrya japonica*)—
crown rot (*Phytophthora cactorum*), XIII, 105
Entomosporium maculatum on, XIII, 103
fruit flies (*Trypetidae*), XI, 431
fruit thinning, XI, 734; XIV, 84
growing—
in Algeria, XIII, 989
in Argentina, XIV, 43
in United Provinces, XII, 1077
research in California, XIII, 987
- Loranthus** hosts, XV, 1239
- Lord Lambourne apple**, abnormalities in, XV, 549, 935, 1024, 1561
- Lovage virus** disease, XIV, 1710
- Low Temperature Research Station**, Trinidad, 1936-41, XII, 1108
- Lower Rio Grande Valley**, citrus varieties for, XI, 1303
- Loxostege affinalis** in S. Australia, XIV, 1452
- Lucerne** as a human food, XIII, 848
- Luffa**—
acutangula, spacing in Trinidad, XIV, 900
aegyptica, loofah sponge or dishrag gourd, XIV, 252, 1756
cylindrica, the vegetable sponge, XIV, 251

SUBJECT INDEX

- Lupin**—
embryo metabolism, **XI**, (31)
soya bean grafts, **XII**, 761
- Luxmoore report**, a review of horticultural section, **XIV**, (19), 1439
- Lyamungu**, *see* Moshi
- Lycopen** in rose hips and other fruits, **XIV**, 1960; **XV**, 2025
- Lycopersicon** and **Lycopersicum**, *see also* Tomato—
chimaeras, **XV**, (431)
species—
to increase vitamins A and C in tomato, **XIV**, 260
reaction to spotted wilt, **XV**, 213
- Lygaeus kalmii** control, **XI**, 439
- Lygus**—
on coffee, control, **XV**, 839
pubulinus—
on black currants, **XII**, 1272, 1319
on strawberries, **XIV**, 1610
spp. on guayule, **XV**, 1745, 1746
- Lymantria obfuscata**, **XV**, 578
- Lyonetia clerkella**, **XV**, 1625
- Lysimeter work**—
at Cornell, **XIV**, (1476)
at Pusa, **XIV**, (1476)
in Switzerland, **XIV**, 1020
- Lytta vesicatoria**, **XII**, 1319
- Macadamia ternifolia**—
chlorosis due to iron deficiency, **XIII**, 1547
cultivation in Queensland, **XI**, 228
grafting, **XIII**, 1632
leaves, content of green and chlorotic, **XIV**, 356
nut, food value, **XII**, 704
oil formation and accumulation in, **XIII**, 612
- Macaulay Institute for Soil Research**—
A.R. 1942/3 and 1943/44, **XIV**, 1443; **XV**, 1354
compost investigations, **XIII**, 368
- Machinery**—
agricultural, new periodical dealing with, **XV**, 2067
for market gardens, **XIV**, 1193
for small farm, work at Askham Bryan on, **XV**, 382
- McKinney rapid index-infection technique**, **XII**, 975
- Macrocentrus**—
ancylivorus, parasite of oriental fruit moth, **XIV**, 1630; **XV**, (1658)a
homonae controls tea tortrix, **XII**, 617
- Macropiper excelsum**, essential oil of, **XII**, (311)
- Macrosiphum**—
pisi, **XIII**, 1451; **XIV**, 813; **XV**, 1847
solanifolii, **XII**, 157
- Macrosporium**—
carotae, **XIV**, 1732
sarcinaeforme, toxicity of thiuram sulphides to, **XIII**, 444
- Madras Dep. Agric.**—
Report on operations 1939/40, **XI**, 1516
Reports of subordinate officers 1939/40 and 1940/41, **XI**, 1034; **XV**, 381
Report of work on agricultural stations 1939/40, 1941/42 and 1942/43, **XI**, 1033; **XIV**, 961; **XV**, 936
- Magnesium**—
availability in different carriers, **XIII**, 667
boron and potassium, interaction on melon, **XII**, 470
colorimetric tests, **XIV**, 954
- Magnesium (continued)**—
deficiency—
in apples, *see* Apple
in citrus, *see* Citrus
in deciduous fruit crops, **XI**, 785
and purple scale of citrus, **XIII**, (562)
in tomatoes, **XIV**, 1771; **XV**, 1815
in tung oil, **XIV**, 1863
in vegetables, **XI**, 785
determination—
in plants, **XIV**, 1008
in soils, **XV**, 1381
as fertilizer, **XIV**, 1198; **XV**, 1495
in pollen grains, **XV**, 1382
role and uptake, **XIV**, 561
sulphate for small fruits, **XV**, 1495
- Maine** agric. Exp. Stat. A.R. 1938/39-1940/41, **XII**, 714, 1155, 1156
- Makhorka** (*Nicotiana rustica*), **XIV**, (691)
- Malacantha alnifolia**, **XI**, 944
- Malaria**—
coffee cherry husk not a cure for, **XIII**, 1521
pyrethrum for fighting, **XIV**, 1182
- Malaya**—
agricultural statistics 1939 and 1940, **XI**, 1035; **XII**, (337)
canning industry, quart. Rep. 1940/41, **XII**, 333
Deps. Agric. A.R. 1939 and 1940, **XI**, 1036
Report on Agriculture in 1940, **XII**, 328
vegetable growing in, **XII**, 313
- Malic acid**, a by-product of apple treacle, **XII**, 1116
- Mallee soils**, salt accumulation in, **XIII**, 784
- Mallotus japonicus** an oil plant, **XV**, 268
- Malpighia** rootstocks, **XI**, 955
- Malus**, *see also* Apple—
baccata—
in apple breeding, **XIV**, 483
sibirica as apple rootstock, **XI**, 387; **XII**, 48
ornamental rootstocks for, **XI**, 1288, 1289
prunifolia—
the Chinese apple, **XIV**, 41, 51, 483
as cold resistant apple rootstock, **XI**, 387; **XII**, 424; **XIV**, 459, 479; **XV**, 948
pumila=Malling VIII, **XIV**, 476
scab resistance, *see also* Apple scab, **XIV**, 1602
subbaccata in apple breeding, **XIV**, 483
zumi in apple breeding, **XIV**, 483
- Mammea americana** as insecticidal plant, **XV**, 1238
- Mandarin**—
bud variant, **XIV**, 1318
citrangequat graft hybrid, **XII**, 203
Clementine, *see* Orange, Clementine
rootstocks for, **XII**, 1462
storage, **XIV**, 1382, 1383
- Manganese**—
content of certain plants, **XIV**, 1029
deficiency—
in agricultural and horticultural crops, **XI**, 786; **XII**, 912, 1190; **XIII**, 1247; **XV**, 1688
in beans, **XV**, 220
in bracken, **XIII**, 16
in cherry, *see* Cherry
in citrus, *see* Citrus
in coconut palms, **XV**, 858
in fruit trees, **XIII**, 803, 1254; **XIV**, 563; **XV**, 1545, 1547
in hemp, **XIV**, 679
in mangold, **XV**, 1686
in pea, **XI**, 1272; **XII**, 186 [?]

SUBJECT INDEX

Manganese deficiency (*continued*)—

- in peach, XI, 1150; XV, 2075
- in raspberry, XV, 508
- in tomato, XI, 480
- in tung, XIII, 1492; XV, 930
- in vegetables, XI, 786; XV, 1688
- in walnut, XII, 105
- determination in fertilizers, XII, 26
- effect on enzyme activity in tomato, XIV, 1276
- as fertilizer in spray form, XI, 863
- iron relations in plant nutrition, XV, 386, (431), 536, 1919
- necessary for synthesis of ascorbic acid, XIV, 1407
- nutrition of squash influenced by micro-organisms in water culture, XII, (1454)
- and pineapple, *see* Pineapple
- and plant growth, effect of liming on, XII, 1362
- salts, absorption by plant storage tissues, XI, (31)
- in soil and plant, its functions and effects, XII, 1190; XV, (34)
- sulphate—
 - and fenching in tung, XII, 1486
 - stimulation of pollen growth by, XV, (34)
 - toxicity to pineapples, XIV, 423; XV, 386, 1919

Manganous sulphate for bracken control, XV, 113

Mango—

- anthracnose (*Colletotrichum gloeosporioides*), XI, 949, 950
- ascorbic acid content, XV, 1977
- biennial bearing in, XI, 227
- black tip disease, XIV, 895
- canning, XIV, 393
- catalase activity, XI, 1417
- classification, XI, 587
- cold injury, XI, 883
- cropping, control of irregularity in, XIV, 893
- cultivation—
 - in Bihar, XII, 1152
 - in Brazil, XV, 852
 - in Malaya, XI, 588
 - in the Punjab, XI, 225
 - in the United Provinces, XII, 1079
- cytogenetics, XV, 380
- dry weight determination, XIII, 653
- flower bud differentiation, XI, 947
- fruit, histopathology of necrotic, XIV, (1370)
- hopper control (*Idiocerus* spp.), XV, 853
- kernels as food, XIII, 1617
- little leaf, XI, 948
- manuring, XII, 647
- mildew (*Oidium* sp.), XII, 261; XIV, 1923
- necrosis, XV, 380
- nutritive value, XIV, 1393
- physiology of growth and ripening, XIV, 894
- polyembryony, XIV, 354; XV, 936
- propagation methods—
 - budding, XI, 226, 851; XIII, 1028, 1546; XV, 1353
 - cuttings, XV, 968, 1235
 - grafting, XI, 1033, 1034, 1415; XII, 1152, 1573; XIII, 611, 1027; XIV, 892, 961
 - various, XI, 1416; XII, 646; XIII, 611; XV, 936, 1986
- pulp for colouring citrus juice, XV, 350
- quick freezing, XIII, 1632
- research—
 - at Kodur, XI, 1034
 - at Sabour, XI, 1044
- respiration, XII, (674)

Mango (*continued*)—

- rootstocks, XIV, 1365; XV, 936
- squash manufacture, XIII, 1606
- storage, XI, 616, 617; XII, (674)
- varieties in Baroda State, XIV, 1922
- Mangold—
 - manganese deficiency, XV, 1686
 - Rothamsted experiments on, XIII, (947)
- Mangosteen (*Garcinia mangostana*)—
 - growth stimulation by yeast extract in, XI, 589
 - rootstocks, XI, 1033; XIV, 961
 - vegetative propagation, XV, 936
- Mangrove—
 - in the New World, XV, 864
 - function of pneumatophore in, XIII, 523
- Manihot—
 - carthaginensis*, an oil plant, XV, 268
 - genus in S. America, XIV, 874
 - glaziovii* a possible rubber plant, XIII, 1386; XIV, 716
 - utilissima*, *see* Cassava
- Manilkara* sp., XII, 1016
- Mannose, *Daubentonia drummondii* a source of, XV, 149
- Manuals on—
 - agricultural botany, XII, 1566
 - agriculture in Uganda, XI, 318
 - on apple—
 - growing in England, XIV, 949
 - pruning in England, XI, 1016; XV, 922
 - varieties, English, XV, 921
 - Basic for Science, XIII, 1623
 - biological control of insects, XIII, 660
 - budding and grafting, XII, 792; XIV, 1051; XV, 1344
 - canning, XI, 1013
 - chemical formulae, XII, 312
 - citrus—
 - breeding, botany and history, XIV, 946
 - diseases (in colour), XII, 1143
 - fruit marketing in S. Africa, XV, 1338
 - growing in Ceylon, XIII, 658
 - cloche gardening, XII, 317
 - coconut diseases, XI, 323
 - compost gardening, XV, 917
 - composts, XI, 1508
 - crops and cropping, XIII, 1626
 - deciduous fruit growing, XI, 1507; XIII, 336; XIV, 54, 416, 949, 1032; XV, 920, 1452, 1453, 2061
 - diagnosis of mineral deficiencies in plants, XIII, 1089; XV, 923
 - diseases—
 - of fruit, XIII, 419
 - nature and prevention, XV, 362; 1566
 - and pests of the garden, XIV, 1109
 - and pests of ornamentals, XIV, 413
 - resistance in plants to, XV, 527
 - of vegetables, XI, 1210; XIII, 657; XV, 609, 1695
 - field crops of India, XV, 1337
 - field drainage, XII, 1565
 - floriculture, XII, 1564; XV, 363
 - flowers in Britain, XV, 2063
 - Food Industries 1941, XII, 315
 - frost as affecting the fruit grower, XV, 2064
 - frost killing—a survey, XV, 918
 - fruit—
 - growing—
 - deciduous *see* Manuals on deciduous domestic, XII, 1567; XIV, 416; XV, 916

SUBJECT INDEX

- Manuals on fruit growing (*continued*)—
 in Tunisia, XV, 366
 in U.S.A., XI, 1507; XIII, 336
 processing, XV, 2014
 varieties in Sweden, XV, 913
 and vegetable pests, XII, (462)
 gardening, XI, 646; XV, 2070
 growth substances, XIV, 453
 herb gathering in England, XII, 709
 herb growing, XII, 316, 1568
 horticulture—
 in Queensland, XV, 1339
 in U.S.A., XI, 319; XII, 1562
 insect pests in stored products, XI, 647
 insect transmission of plant diseases, XI, 644
 market gardening, XV, 912
 mushrooms and edible fungi, XIII, 1622; XIV, 1433, 2014
 nutrient deficiency symptoms, XI, 1015; XII, 318; XIII, 1089; XV, 923
 nutrient solutions, XIV, 2007
 nutrition of plants, XIV, 2005; XV, (1493)a
 nuts, XV, 1529
 oil plants, XV, 1124
 olive production throughout the world, XIII, 1628
 pear growing in England, XIV, 949
 pests and diseases—
 of fruit, XIII, 794
 of ornamentals, XIV, 413
 phytopathology (in Italian), XIII, 793
 plant(s)—
 analysis, XIV, 2008
 microtechnique, XI, 1014
 physiology, XI, 642
 protection, XIV, 1107; XV, (599)
 science formulae, XII, 312
 tissue cultures, XIV, 414
 and plant science in Latin America, XV, 2069
 and vitamins, XIII, 1624
 processing, proposal for, XV, 1311
 propagation, *see also* budding, XV, 465
 pruning, XI, 1016; XIV, 2011; XV, 922, 1343
 quince growing in England, XIV, 949
 reproductive capacity of plants, XIII, 1088
 root disease fungi, XV, 915
 rubber production (*Hevea*), XV, 2066
 seed and potting composts, XI, 1508
 seed production of vegetables and root crops in several lands, XIII, 1099, 1625
 shade and ornamental trees, care of, XIII, 337
 shelter trees, XV, 914
 soft fruit growing in England, XIV, 948, 2012, 2013
 soil—
 analysis, XIV, 2008
 fungi, XV, 1342
 soilless culture, XI, 320-322; XIV, 415
 stone fruit growing in England, XIV, 949
 tomato growing in England, XIV, 2014
 trace element biochemistry, XII, 710
 trees and shrubs for English conditions, XV, 919
 tropical and sub-tropical agriculture, XV, 1974
 vegetable—
 gardening in Malaya, XII, 313
 growing, XIV, (1803); XV, 2068
 preparation for market and storage, XI, 1509
 seed production, XIII, 340, 1625
 virus diseases, XIV, 947, 2010
- Manuals on (*continued*)—
 war gases and foodstuffs, XII, 1569
 weed control, XIII, 659
- Manures, *see also* Manuring and Fertilizers—
 coconut poonac as, XI, 230
 farmyard, and handling thereof, XI, (380), (1092); XV, 382
 liquid, for horizontally trained trees, XII, 820
 magnesium, XIV, 1198; XV, 1495
 organic—
 composition of various, XIII, 394
 growth substances in, XV, 1404
 necessary in horticulture, XII, (85), 1360
 various, for vegetables, XIV, 1197
 in U.K. and manuring, XI, 16, 1113
 value of silt as, XV, 273
- Manurial trials in Trinidad, XI, 546
- Manuring—*see also* Manures and Fertilizers—
 apples, *see* Apple
 asparagus, XIV, 1739
 banana, *see* Banana fertilizers
 beans, *see* Bean
 blueberries, *see* Blueberry
 bulbs, XI, 135, 826
 cabbage, *see* Cabbage
 carrot, *see* Carrot
 cauliflower, *see* Cauliflower
 cherry, *see* Cherry
 citrus, *see* Citrus
 coconut, *see* Coconut
 coffee, *see* Coffee
 and cold resistance, XV, 409
 composts for, *see* Compost making
 cucumbers, *see* Cucumber
 date palm, XII, 1491
 deep, XII, 1249
 delphinium, XII, (548)
 in England, manures and, XI, 16, 1113
 economics of, XII, 597
 fruit—
 in Belgium, XV, 1472
 in California, XII, 1251; XIII, 753
 composition affected by, XII, 1248
 in England, XI, 1113
 in France, XV, 1471, 1473
 in Italy, XI, (737)
 in Pennsylvania in war, XIII, 752
 in Russia, XII, 1249
 in Sweden, XIII, 392
 in Switzerland, XI, 1114; XII, 1247; XV, 1469
 flax and linseed, XII, 528
 glasshouse crops, XI, 783
 grapefruit, *see* Grapefruit
 green—
 in Argentina, XI, 371
 of citrus, XII, 1001
 cowpeas for, XI, 55
 Crotalaria juncea for, XI, 910
 deep rooting cover crops for, XII, 599
 Desmodium diffusum for, XII, 598
 the edua pea for, XI, 909
 leguminous plants for, XIII, 755; XV, 1917
 in Palestine, XI, 1349
 in Queensland, XII, 1026
 for raspberries, XIII, 404
 soil nitrogen losses affected by, XII, 1188
 as source of nitrogen, XI, 176; XIV, 1069
 in S. Africa, XV, 61
 for tea, XV, 929
 for tobacco, XV, 274

SUBJECT INDEX

- Manuring, green (*continued*)—
 in tropics, **XI**, (1359); **XV**, 1920
 for vegetables, **XIV**, 650
 hemp, **XIV**, 1691
 horticultural plants, *see* Nutrition
 lettuce, *see* Lettuce nutrition
 mango, **XII**, 647
 minor elements necessary in carrot and
 turnip, **XIV**, 1730
 nitrogen forming bacteria, **XII**, 31
 onions, *see* Onion
 ornamental shrubs, etc., **XII**, 536
 peach, *see* Peach
 pecans, **XII**, 416; **XV**, 523
 phosphatic—
 for fruit, **XII**, 1251; **XV**, 1473
 of potato, **XII**, 476
 in sandy soil, **XIII**, 1135
 for vegetables, *see* Vegetables
 pimiento, **XI**, 461
 pineapple, *see* Pineapple
 potash, seaweed for, **XIII**, 393, 1104
 potassic, *see* Fertilizers and particular crops
 potato, *see* Potato
 raspberry, *see* Raspberry
 root shape in carrot affected by, **XIII**,
 1395
 rubber, *see* Rubber
 sewage, use of, **XIII**, 1136
 soya bean, *see* Soya bean
 strawberries, *see* Strawberry
 superphosphate, **XII**, 1361
 tea, *see* Tea
 theories on, **XI**, (31)
 tobacco, *see* Tobacco
 tomato, *see* Tomato
 tung seedlings, **XIII**, 1490
 turnips, *see* Turnip
 vegetables, *see* Vegetables
 and vitamins in tomato, **XV**, 375
 in wartime, **XI**, 1113; **XII**, 1359; **XIII**,
 752
 Maple sugar industry in U.S.S.R., **XIV**, 1214
Mappia foetida oil plant, **XV**, 360
Maranta arundinacea, *see* Arrowroot
Marasmius—
 in manila hemp, **XI**, (1365)
 pernicius in cacao, *see* Cacao, witches'
 broom
 Marigolds—
 growth substances for propagating, **XII**, 339
 in Pennsylvania, **XIII**, (245)
 Marjoram (*Majorana hortensis*) growth require-
 ments, **XV**, 162
 Market garden, *see also* Vegetables—
 conversion of grassland to, **XIV**, 643
 electricity for, **XV**, 1085
 English problems, **XV**, 603
 irrigation for, **XV**, 605
 for Lisbon, **XIV**, 162
 manual, **XV**, 912
 mechanization in, **XIV**, 1193; **XV**, 1086
 in New Zealand, legislative aids to, **XV**,
 383
 organic matter important in, **XIV**, 173
 Swiss, soil analysis of, **XV**, 944
 Marketing—
 agricultural, in British Colonial Empire, **XII**,
 1022
 of apples, *see* Apples
 co-operative, of fruit and vegetables, **XIII**,
 (403)
 Marketing (*continued*)—
 fruit—
 in Sweden, **XIV**, 91
 in United Provinces, **XII**, 1073
 of vegetables, *see* Vegetables
 Markets—
 for Argentine fruit abroad, **XIII**, (770)
 in New York State, regional, horticultural,
 XIV, (1545)
 Marmalade—
 from dried citrus fruits, **XII**, 1125
 of high vitamin C content, **XII**, (1142)
 Marmor—
 laesiofaciens of beans, **XIV**, 798
 phaseoli associated with *Xanthomonas phase-*
 oli, **XIV**, 1788
 Marrow, *see* Vegetable marrow
 Marsh spot in beans or peas, **XI**, 1272; **XII**, 186;
 XV, 220
Marssonina panattoniana, **XIV**, 1263
Martynia diandra seed oil, **XI**, 570
Mascarenhasia elastica, a rubber plant, **XII**, 1068
 Massachusetts agric. Exp. Stat. A.R. 1943/44, **XV**,
 937
 Maté (*Ilex paraguensis*)—
 cultivation in Argentina, **XIV**, (365), 887, 1906
 geometrid pest, **XIV**, (903)
 Matengo—
 Highlands, Tanganyika, agriculture in, **XIV**,
 1880
 pit system of hillside cultivation, **XIV**, 1880
 Mating discrimination in plants, **XIII**, 684
Matthiola bicornis germination, **XIII**, 689
 Maturity—
 of fruit, determination, *see* Fruit maturity
 in fruit trees, juvenility and, **XIV**, 1505
 Mauritius—
 Chamber of Agriculture, A.R. 1940/41 and
 1942/43, **XII**, 718; **XIV**, 961
 Coll. Agric., Proc. former students, **XII**, 717
 Dep. Agric. A.R. 1939-1942, **XI**, 1038;
 XII, (337), (1584); **XIV**, 1444
 Sugar Cane Res. Stat. A.R. 1939-1943, **XI**, 1037,
 1517; **XII**, (1584); **XIV**, (968); **XV**, (946)
 Measurements, *see* particular objects
 Mechanization of market gardening, **XIV**, 1193;
 XV, 1086
 Medicine, use of plants in, **XIV**, (1298)
 Medicaments produced from plants in wartime,
 XIV, 1236
 Medicinal plants, *see also* Herbs—
 of Algeria, **XV**, 1735
 alkaloid producing, **XV**, 1741
 in Arabia Felix, **XIII**, (267)
 Aristolelia, **XIV**, 1237
 Atropa belladonna, **XIV**, (1298), 1719, 1720;
 XV, 175
 Australian investigations, **XII**, 1146, 1147;
 XIII, 1630; **XV**, 369, 1348
 Azerbaidžan Botanical Institute work on,
 XIV, 1718
 British Empire production, **XI**, 819, 1281
 of Brooklyn Botanic Gardens and their
 properties, **XIV**, 1235
 of Bulgaria, **XIV**, (1298)
 buttercup as, **XIV**, 712
 cardiac, **XV**, 177
 Cassia occidentalis, **XV**, 843
 Cinchona, *see* *Cinchona*
 Combretum micranthum, **XV**, 843
 composition, growing conditions affect, **XV**,
 162

SUBJECT INDEX

Medicinal plants (*continued*)—

cultivation—

- in England, XI, 1279, 1280; XII, 948; XIII, 170
- in Germany, XIV, 222
- in Guatemala, XII, 1046
- in Mexico, XIV, 221
- in Minnesota, XV, 1355
- in Queensland, XI, 1521
- in Tucuman, XII, 1583

Datura see *Datura*

diseases and pests, XIV, (290)

dried, *Plodia interpunctella* pest of, XV, (1853)f

drying, XII, 686

of Dutch East Indies, research on, XI, 1352

of East Africa, XI, 571

Eminium lehmannii, XIV, 1910*Erysimum* spp., XV, 177*Hyoscyamus niger*, XV, 176

of India, XV, 1337

Leonurus spp., XV, 655*Lobelia inflata*, XV, 175*Martynia diandra*, XI, 570

of Mauritius, XII, 1045

in Mexico, XIV, 221

in New Zealand, XI, 1518; XII, 521; XIII, 344, 1633

Orthosiphon grandiflorus, XI, 1399*Polemonium coeruleum*, XV, 655*Polygonum dumetorum*, XII, 1368

Queensland trials, XII, 331; XV, 387

research, a German survey, XI, 489

Simaruba glauca, XII, 588

soil and climatic conditions for, XIV, 711

stramonium, see also *Stramonium*, XI, 936; XII, 1411; XIV, 224, (715), 1238, (1298)*Tabernanthe iboga*, XV, 843

of U.S.S.R., new, XV, 655

vitamins in, XV, (227)

Medicinal properties of ornamentals, XI, (1300)

Mee tree (*Bassia longifolia*) as rootstock for sapodilla, XIV, 891*Megacoeleum modestum*, XI, 80Megasea (*Bergenia* spp.) a source of tannin, its cultivation, XI, 491*Melaleuca* spp. oil producers, XV, 168*Melampsora lini*, XII, (1454); XIII, 477; XIV, 1688; XV, (758), 1117*Melanotus longulus*, XIV, (665)*Meligethes aeneus*, pest of rape, XIV, 708; XV, 652*Melissopus latifolius*, XIV, 605; XV, 1044*Melittia satyriniformis*, XII, (880)*Melittomma insulare*, a pest of coconut, XI, 595

Melon, see also Cantaloupe—

acclimatization to short growing seasons, XV, 1786

aphis (*A. gossypii*) control or resistance, XIV, 1752, 1753*Bacterium fascians* disease, XIV, 249

cultivation—

in Brazil, XIV, (290)

in Iceland, XIV, 766

fly (*Dacus cucurbitae*), XII, 271; XIV, 250

grafted on pumpkin, light and temperature affect union, XIV, 768

interaction of potash, boron and magnesium on, XII, 470

musk—

breeding, XIII, 196'

Melon, musk (*continued*)—

cultivation—

in Eastern U.S.A., XII, (833)

in Iowa, XV, 1902

Purdue 44, XV, 1788

quality determination, XI, 1247

volume and density estimation, XV, (758)

wilt, *Fusarium* spp., XV, (758)the Peruvian (*Solanum muricatum*), XIII, 344

storage, XI, 276

water—

ancestors of, XV, 200

citron hybrid, galls on roots, XV, 1789

cultivation—

in Brazil, XIV, (290)

in Iowa, XV, 1902

fruit composition, XI, 408, 409

parthenocarp induced in, XII, 168

pinching back, XV, 1787

pollination method, XIII, 924; XIV, 767

a polyploid, XV, (758)

rind processing, XIII, 1084

vitamin content, XI, 1248

wilt disease (*Fusarium* spp.), XIII, 197; XV, 708, 1790*Mentha piperita* spp., see Peppermint*Mentha* spp., see Mint

Mentors—

affect—

apple seedlings, XI, 384

cherry hybrids, XII, 797

fruit plants, XII, 1209

herbaceous plants, XII, 760-763

pigment transmission, XI, 1104

tomato hybrids, XII, 971

root grafting hybrids on, XI, 1103

Merbein Research Station, reports on work, XIII, 1063; XV, 369

Mercurialis annua, sex differentiation tests in, XIV, 440

Mercuric chloride—

adsorption by gladiolus corms, XII, (200)

for preserving cyanogenetic plants, XI, (1092)

use in transplanting liquids, XIV, 1259

for virus inactivation, XIV, 1703

Mercury—

compounds for banana panama disease, XIV, 359

fungicidal action, XII, (138); XIII, (123)

vapour affects seed germination, XII, 1196

Merodon equestris, XII, 544; XIII, 1461

Mesa experiment farm, Arizona, XI, 902

Mesohomotoma tessmani, see Cacao psyllid

Metabolism—

criticism of theories on plant, XIV, 1022

iron-manganese relation in plant, XIII, 226

plant, study in sterile cultures, XV, 1

Metaborates, study of aqueous solutions, XIV, 450

Metaphosphate, its use in nutrient solutions, XIII, (1138)

Metaphycus helvulus, parasite of black scale of citrus, XII, 1474; XIII, 978*Metarrhizium anisopliae*, green muscadine fungus, for biological control of pests, XI, 954; XV, 585

Metaxenia in apple, XII, 55

Meteorological Observatory, Stellenbosch, XIV, 1033

Meteorology and frost protection, XV, 1554

Methylalyl chloride as grain fumigant, XIII, 1630

SUBJECT INDEX

- Methyl bromide—
 for colouring fruit, **XI**, (737)
 dichlorethyl ether as soil fumigant, **XII**,
 (1347)
 fumigation, **XI**, (1300); **XII**, (1328), (1460);
XIII, (451), 558, (562), 1351, 1571, 1572;
XIV, 186, (635), 831, 859, 1809, (1816),
 1953; **XV**, 743, 871, 872, 1309, 1359
 toxicity to red spider and to roses, **XI**, (1300)
- Methyl cellulose—
 to check evaporation, **XIV**, 1468; **XV**, 763
 uses, **XIV**, 1019
- Methyl indolylacetic acid, **XII**, 78
- Mice in orchards, control, **XV**, 1632
- Microbial surface growth, spice oils for controlling,
XIII, 1614
- Microchemistry, a review of work in 1942, **XIII**,
 1629
- Microclimatology—
 some factors in, **XV**, 1554
 study in S. Africa, **XI**, 1112
 a survey, **XV**, 1399
 a textbook on, **XIV**, (458)
- Micro-elements, *see also* Fertilizers, minor
 elements—
 compared in efficacy with growth substances,
XV, 427
 spraying increases photosynthesis, **XII**, 1180
- Microfilms in libraries, **XIII**, 373
- Micrografting, **XV**, (431)
- Micro-incineration for determining mineral pattern
 of plants, **XIII**, (375)
- Micro-organisms—
 absent in healthy tissues, **XIV**, 1130
 appraising air-borne, **XI**, 663
 collection at Peoria, Ill., **XIII**, 1616
 soil-borne, rotting peas, **XIV**, 812
 staining, **XI**, 664
 volatiles evolved by flowers and leaves source
 of nutriment to, **XV**, (34)
- Microphotometer, a direct reading, **XI**, 1080
- Microscope—
 the electron, **XIII**, 1629
 manufacture, *Frustulia rhomboides* for, **XV**,
 1375
- Microscopy, oil from *Juniperus turcomanica* for,
XV, 356
- Microtechnique—
 manual of plant, **XI**, 1014
 for shoot apex, **XI**, 351
- Mičurin—
 Horticultural Institute, **XIII**, 716; **XIV**, 1031
 methods—
 of acclimatizing fruit trees, **XIV**, 25
 adopted in Siberia, **XIV**, 461
 his successor, Jakovlev, **XII**, 1209
 varieties—
 apple, **XIII**, 717
 frost resistance in, **XII**, 371, 373
 hardy hybrids, **XII**, 96
 small fruit, **XII**, 373
 work, a survey, **XIV**, 29
- Middle East Agricultural Development Conference
 Proceedings, **XV**, 938
- Mildew, benzene vapour treatment, **XV**, (598)
- Mildews, powdery, overwintering, **XV**, (597)
- Mildura Irrigation Settlement, soil survey, **XI**, 65
- Milkweed (*Asclepias syriaca*) seed oil, **XV**, 1126
- Millet oil, important properties of, **XIV**, (1431)
- Milletia* spp. as insecticidal plants, **XIII**, (578);
XIV, 1657
- “Milorganite” source of minor elements, **XII**, 821
- Mimosa*, *see also* Wattle—
bracatinga—
 cultivation, **XV**, (865)
 effect of freeze on, **XI**, (965)
pubica, psychological tests on, **XV**, 1371
Mimosaceae, seed oils of, **XV**, (2059);
Mimusops spp. as rootstocks for sapodilla, **XIV**, 891
Mineola—
scitulella, **XV**, 1629
vaccinii, **XI**, 1194; **XIV**, 140; **XV**, 1631
- Mineral elements, function in plant nutrition, **XV**,
 1376
- Minor elements, *see* Fertilizers, minor elements,
 Micro-elements, Radioactive elements,
 Rare earths, Trace elements and particular
 elements
- Minnesota agric. Exp. Stat. A.R. 1938/39 and
 1942/43, **XI**, (1054); **XV**, 1355
- Minsk research institute under German direction,
XIII, 709
- Mint—
 cultivation, **XIV**, (734), 1907; **XV**, 163
 photoperiodic behaviour, **XI**, 1236
 rust, **XII**, 482
- Mirabilis jalapa*, heteroauxin inhibits stem abscis-
 sion in, **XV**, 1402
- Missouri agric. Exp. Stat. A.R. 1938/39, **XIII**, 1095
- Mite(s), *see also* *Tarsonemus*—
 of avocado, *see* Avocado
 control—
 orchard and garden, **XIII**, (845)
 xanthone for, **XIV**, 1625
 cyclamen, *see* *Tarsonemus pallidus*
 European red, *see* *Paratetranychus pilosus*
 mushroom (*Tyrophagus lintneri*), **XV**, 757
 pacific, *see* *Tetranychus pacificus*
 red, *see* *Paratetranychus pilosus*
 red-legged, earth (*Halotydeus destructor*),
XIV, 662
 red spider, *see* *Tetranychus telarius*
 on shade and ornamental trees in western
 U.S.A., **XIV**, 1814
- Mitochondria, evolution of viruses from, **XIV**, (161)
- Moisture, cobalt salts as indicator of, **XV**, (972)
- Mole—
 control of water, **XIV**, 148
 crickets (*Scapteriscus* spp. and *Gryllotalpa*)
 control, **XIV**, 666; **XV**, 108
 destruction, **XIII**, 837, 838; **XV**, (599)
- Molybdenum—
 deficiency, **XV**, 1689
 determination in plants, **XIV**, 1010
 essential to plant growth, **XI**, 369
 injury to tomato, **XII**, 1436
 for lettuces, **XII**, 499
 N fixation affected by, **XIII**, (23)
 response of plants to, **XIII**, (1138)
- Momordica charantia* resistance to *Dacus cucur-
 bitae*, **XII**, 271
- Monarda* spp., photoperiodic behaviour, **XI**, 1236
- Monardia fistulosa* an oil plant, **XV**, 1363
- Monilia*—
cinerea—
 on apple, **XV**, 562, (1659)c
 on cherry, **XI**, (77)
 on peach and almond, **XIII**, 426
 on pear, **XI**, 1162; **XII**, 443
fructigena, possible cause of hazel nut drop,
XIV, 584, 1607
 spp.—
 on apple and pear, **XII**, 443
 on apricot, **XII**, 1310, 1311; **XIV**, 1139

SUBJECT INDEX

- Monochloroacetic acid in fruit juices, XIV, (1431)
 Monocotyledons, types of vessel in, XII, (1195)
Monstera deliciosa—
 cultivation, XII, 645
 harvesting and packing, XV, 849
 Montserrat agric. Dep. A.R. 1939 and 1940, XI, (1054); XII, (1164)
 Moon and seed germination and growth, XI, 1076; XII, 1, 354, 1181
 Moor soils, vegetable growing on, XIV, 164
Morchella conica autotrophic to aneurin, XV, (758)
Moringa concanensis seed oil, XIV, 888
Moringa pterygosperma, a fence plant in Cuba, XV, 1236
 Morphine from poppy, XII, 946; XIV, 709
Morus, see also Mulberry—*alba*, seedlings, short day length affects, XII, 744
 Moshi—
 Coffee Res. Stat., Lyamungu, A.R. 1938/1943, XI, 1048, 1522; XII, 1159, 1582; XIII, 1635; XV, 388
 first 10 years of coffee research at, XV, 1936
 Moss-peat situation in U.S.A., XIII, (1138)
 Moth, see also particular moths—
 diamond back, see *Plutella maculipennis*
 fruit sucking *Ophideres* spp., XV, 305
 group, caterpillars of winter, XIV, 1624
 Mottle leaf of deciduous fruit trees, XIV, 563
 Mountain ash (*Sorbus aucuparia*)—
 a graft hybrid of, XIII, 721
 a host for *Argyresthia conjugella*, XIII, 831
 the Moravian, as source of vitamin C, XV, 46
 rootstock for pear, XI, 388; XIII, 384
 Mountain plants, physiological and biochemical peculiarities, XV, 1392
Mucuna edulis, XI, 909
Mudaria variabilis, XII, (1518)
 Mulberry—
 fibres from cortex, XIV, 203
 growing, XII, 369; XIV, (534), 976
 hermaphrodite flowers of *Morus indica*, XII, (370)
 seed germination, XI, (1079)
 seed oil, XII, 1548
 Mulch—
 dust, XII, 1363
 Mulching—
 apple orchards, see also Apple, soil management, XI, 727; XIV, 73-75, 1077, 1521
 cacao, XI, 1390
 with hay, XIV, 73, 1077, 1521
 K content of apple leaves influenced by, XIV, 75
 for moisture conservation, XIV, 77; XV, 401
 sawdust for, XIV, 9
 soft fruit, XIII, 411
 soil, in Germany, XII, 1204
 sphagnum moss peat for, XII, 533
 tung oil, XIV, 323
 vegetable crops in S. Africa, XV, 137
 walnuts, XIV, 1563
 Wega mulch for, XII, 1204
 wheat straw, for apples, XIV, 74
 Mume propagation, XII, 47
 Mung beans (*Phaseolus aureus*), XV, 1705
 Murray Irrigation Areas, pests and diseases, XIV, 552
 Murray Valley viticultural trials, XIII, 83, 84
 Murrumbidgee Irrigation Area—
 horticultural plantings in, XIV, 465
 irrigation practice, XIV, 78
 Musa, see also Banana—
 edible diploids, XIV, 357; XV, (1298)
 textilis, see Hemp, manila
 Mushroom—
 beds—
 infection by *Pseudobalsamia microspora*, XI, 816
 truffle contamination of, XIV, 1802
 compost, XI, 1277; XII, 1449; XIV, 816
 diseases, XIV, 818; XV, 756
 food value, XIII, 1453
 flies, control, XV, 385
 growing—
 in Burma, XV, 1297
 cultural and genetic problems, XIV, (1298)
 in India, XI, 1445
 at Komarov Institute of Botany, XV, 226
 nutritional problems, XV, 754
 growth, inhibiting factors, XIV, 817
 insects, XIII, 230
 manuals on common edible, XIII, 1622; XIV, 2014
 mite (*Tyrophagus lintneri*), XV, 757
 mummy disease, XV, 1848
 in Palestine, XII, (1450)
 pests, *Neosciara solani*, XIV, (819)
 Russian variety Gruzdi, XIV, 1295
 spores—
 physiology of germination, XIV, (819)
 secondary, XII, (982)
 wood preservatives affect growth, XIII, 1452
 Mustard—
 black—
 a study of, XV, 1724
 sulphur deficiency affects, XIII, 494
 and cress production, XII, 1354
 Evergestis extimalis a pest of, XIV, 234
 growing conditions suitable for, XV, 162
 growth substances and, XI, 659
 oils—
 in crucifers and clubroot, XIII, 1408
 in rape, XV, 1727
 physiology of, XIV, 1713
 seed production (*Brassica alba* and *nigra*), XIII, 493
 vernalization, XII, 483, (942); XIV, 1713; XV, 164
 volatile mustard oil absent in *Sinapis alba*, XV, 165
 Mutations, see Bud mutations
 Mycology, introduction to industrial, XIV, 1434
Mycogone perniciosa, a mushroom disease, XV, 756
 Mycorrhiza—
 in filberts and walnuts, XIV, 1104
 of *Hevea brasiliensis*, XI, 940
 in *Pinus virginiana*, XI, 378
Mycosphaerella—
 angulata disease of vine, XII, 861
 caryigena, XII, 119
 citrullina on cucurbits, XV, 1795
 louisianae on strawberry, XI, 760
 musicola, see also *Cercospora musae*, XI, 956; XIV, 2022
 pinodes, XII, 981
Myristica moschata, see Nutmeg
Myrciaria cauliflora, effect of freeze on, XI, (965)
 Myrobalan, see *Prunus cerasifera*
Myroxylon balsamum, XII, 1016
 Mysore Agricultural Calendar 1941/42, XII, (337)
Myxomatosis cuniculi virus, possible control of rabbits, XV, 109

SUBJECT INDEX

- Myxosporium mali* causing canker in apple, XIII, 1274
- Myzodes persicae* vector of potato viruses, XII, 477; XIV, 191
- Myzus*—
- cerasi*, XIII, 431; XIV, 598
 - persicae*—
 - control, XIV, 1620; XV, 1775
 - overwintering of, XI, 763
 - as potato aphid, XII, 157, 478
 - salivary secretion, XV, (128)
 - vector of—
 - peach mosaic, XV, 1026
 - tobacco etch virus, XI, 1284
- Names of plants, their gender in French, XV, 950
- Nanking University research projects, XI, 1306
- Naphthalene—
- acetamide, *see* Growth substances
 - acetic acid, *see* Growth substances
 - crude, to control cabbage, carrot and onion fly, XIII, 1405
 - seed treatment, XIV, 1241
- Naphthoxyacetic acid, *see also* Growth substances—fumigation effect on tomato, XIII, 522
- Naphthyl acids, *see* Growth substances
- Naranjilla (*Solanum quitense*), XV, 1990
- Narcissus—
- basal rot control, XIV, 832, 833
 - bulb disinfection, pre-storage, XII, 987
 - bulb fly (*Lampetia equestris*)—
 - field control, XIV, 1813
 - fumigation for, XII, (1460)
 - colour, brightness due to environment, XI, 833
 - culture in Virginia, XV, 1862
 - diseases, white mould, XI, 137
 - eelworm (*Anguillulina dipsaci*), XI, 834
 - formalin used in hot water treatment of, XIV, 832, 833
 - growth of "breeders" in, XI, 832
 - hot water treatment, XIII, 539; XIV, 832, 833; XV, 243
 - mosaic, vectors of, XIII, 540
 - paper white, bulb size, XI, 1296
 - pests, XII, 544; XIII, 1461
 - root response to growth substances, XIV, 457
 - stripe disease, XIII, 954, 1460
 - varieties, XI, (836)
- Nasinu, Fiji, citrus introductions, XI, 141
- Nasturtium (*Tropaeolum majus*)—
- boron affects N distribution in, XIV, 829
 - growth substances and, XV, (34)
 - vitamin C in, XIV, 1399
- Natal plum (*Carissa*) in California, XIII, 987
- National Agricultural Advisory Service for U.K., XIV, 971
- National Institute of Agricultural Botany, Cambridge, A.R. 1939/40-1941/42, XII, 1150; XIV, 1445
- National Institute of Agricultural Engineering, Asgham Bryan, A.R. 1943/44, XV, 382
- National Research Council of Canada, A.R. 1942/43 and 1943/44, XIV, (1455); XV, 926
- Nebraska agric. Exp. Stat. A.R. 1940, 1941 and 1944, XII, (337); XIII, 1096; XV, (2082)b
- Nectarine—
- chilling requirements, XII, 60, 61
 - dehydration, XV, 2075
 - fruit bud development, XIV, 66
- Nectria*—
- cancriferi f. aurantii* on oranges and lemons, XII, 217
 - galligena*, XII, 1302
- Nematode, *see also* Eelworm, *Heterodera*, etc.—
- citrus (*Tylenchulus semipenetrans*), XII, 563
 - control—
 - with Dowfume, XIV, 1810
 - with Gesapon, XV, 588
 - by mulching, XV, (758)
 - with sodium nitrite, XV, 1358
 - with sodium selenate, XV, (598)
 - peach rootstock resistance to, XIV, 1612
- Nematus ribesii*, *see also* Gooseberry sawfly, XIV, 1610
- Neofabraea malicorticis*, XII, 1317; XIV, 580, 1605
- Neosciara solani* a pest of mushrooms, XIV, (819)
- Nephantis serinopa*, *see* Coconut caterpillar
- Nepheleium*—
- litchi*, XI, 1419, (1420)
 - mutabile* and *N. lappaceum* in the Philippines, XI, 1419
- Netherlands, *see* Dutch
- Nettle (*Urtica dioica*)—
- seed oil, XII, 1549
 - uses of, XII, 1392; XIV, 1669; XV, (758)
- Neurotoma flaviventris*, XII, 1319
- New Guinea—
- Dep. Agric. A.R. 1939/40, XI, (1526)
 - native food crops, XII, 237
 - rubber production, XII, 252
- New Hampshire agric. Res. Stat. A.R. 1938-1940, XII, 1578
- New Jersey—
- agric. Exp. Stat. A.R. 1941/42-1943/44, XIV, 2026; XV, (2082)c
 - apple growing, XIII, 715
- New South Wales—
- apple industry in, XV, 435
 - deciduous fruit growing, XIII, 1139
- New York agric. Exp. Stat. Geneva—
- A.R. 1939/40 and 1943/44, XI, 1039; XV, 939
 - research at, XI, 697
- New York State hort. Soc., Proc. 88th and 90th meetings, XIII, 1097; XV, 1356
- New Zealand—
- agriculture in Waimea County, XV, 35
 - Dep. Agric. A.R. 1940/41, 1943/44 and 1941/42 and 1942/43, XII, 329; XV, 383, (2082)d
 - D.S.I.R., A.R. 1940/41-1944/45, XI, 1518; XII, (405); XIII, 344, 1633; XIV, 2025; XV, 2075
 - fruit acreage, XV, 433
 - horticulture in, XIII, 1107; XV, 433
 - rootstock nursery, XIII, 1158
- Nezara viridula*, XIV, 1452; XV, 1348
- Niacin sources, XV, 1329
- Nickel, fungicidal action, XI, (138)
- Nicotinamide and nicotinic acid, *see* Growth substances
- Nicotine—
- acid, a precursor of, XV, (1336)
 - determination in mixtures, XIV, (1431)
 - detection in plant material, XV, (1853)b
 - extraction from tobacco, XII, 693; XIV, 400
 - fumigation injury to soya bean, XIV, 1289
 - production prospects in England, XV, 1657
 - in tobacco and in plants grafted with or on tobacco, XI, 499; XII, 176; XIII, 482; XV, 154

SUBJECT INDEX

Nicotiana—

- alkaloids in, **XIII**, 140, 141
- gossiei*, photoperiodicity, **XIV**, 684
- induced heteroploids in, **XIII**, (893)
- rustica*—
 - cultivation, **XIV**, (691)
 - organic acids in, **XIV**, 685
- tabacum*, growth hormones and fruit set in, **XIII**, 480
- tobacco and other species, **XIII**, (1369)
- virus I. K.M.S., **XIV**, 869

Nigeria—

- Dep. Agric. A.R. 1943, 1939/40 and 1941/42, **XV**, 940, 1357
- fruit export development, **XI**, 223
- fruit industry, **XV**, 303
- Oil Palm Res. Stat. A.Rs. 1939/40-1941/42, **XIII**, 666

Nigrospora sphaerica, **XI**, 1437*Niptus hololeucus*, pest of dried fruit, **XII**, 1538*Nitraria schoberi*, a shrub for saline soils, **XV**, 236

Nitrate—

- absorption of citrus from culture solutions, **XII**, 1466
- absorption by plants as an anion exchange phenomenon, **XIII**, (697)
- content of plant sap, **XIII**, 696
- in plant tissue, analysis of, **XV**, 954
- in soil, cultivation affects, **XI**, 1119

Nitrites in citrus soil, toxicity of, **XIII**, 1474; **XV**, 4

Nitrogen—

- atmospheric, use by non-leguminous plants, **XIV**, 1474
- and carbohydrates in apple trees, **XIII**, 53
- deficiency symptoms, **XI**, 720; **XII**, 999; **XIV**, 554, 1829
- determination—
 - in plants, **XIV**, 1008, 1009
 - of soluble, **XIV**, (1476)
- fixation—
 - affected by molybdenum and vanadium, **XIII**, (23)
 - biological, **XIV**, 446
 - by soil organisms, **XII**, 743
- intake—
 - of apple trees at low temperatures, **XIV**, 70
 - by grapefruit, **XII**, 208
- metabolism in plants, **XIII**, 691
- movements in apple trees, **XIV**, 508
- from organic materials, **XIII**, 64
- and plant growth, **XV**, 24
- in rain in Ceylon, **XII**, (273)
- requirements of vegetables in Alabama, **XIV**, (1803)
- in sand cultures, effect on apple and peach, **XII**, 399
- in waste materials, **XIII**, 394

Nitrous acid and loss of nitrogen, **XIV**, 1475

Nodules—

- nitrogen excretion by vetch, **XIII**, 1473
- root, of the *Leguminosae*, **XIII**, 1120

Nomenclature—

- of bacterial plant pathogens, **XIV**, 1595
- of French plant names, their genders, **XV**, 950
- of fungi, C. J. Lloyd's proposals, **XIV**, (1662)
- of plant diseases, British, **XV**, 364
- terms applied to different types of vegetation, **XV**, 30

Nomograms for soil density determination, **XIII**, (31)Nomograph for measuring, **XI**, 1251Normicotine determination, **XIV**, (1431)North Carolina agric. Exp. Stat. A.R. 1943, **XV**, 1358Northern Ireland agric. Res. Inst. Hillsborough A.R. 1940/41-1943/44, **XI**, (1526); **XII**, (1584); **XIV**, 958; **XV**, (391)Northern Nut Growers, Proc. 30th annu. Meet., **XI**, 1040Northern Rhodesia Dep. Agric. A.R. 1941 and 1943, **XII**, (1584); **XIV**, (2030)*Nothoscordum fragrans*, **XV**, 1704Nova Scotia apple industry, **XII**, 368Nucleus, biology of cell, **XV**, 15Nursery, *see also* Rootstocks—auto-irrigation apparatus, **XI**, 1100

certification or control—

in eastern U.S.A., **XIV**, 492in England, **XIII**, 710in Georgia, U.S.S.R., **XI**, 309in Germany, **XI**, (406)in Sweden, of fruit trees, **XIII**, 376in Switzerland, **XV**, 1438Isil'kul, in Siberia, **XIV**, 45position in England at end of war in 1945, **XV**, 1447products, fumigation chambers, **XIV**, 627the Rubcov, **XIV**, 44in Spain, **XV**, (1006)stimulants, **XIV**, 459

stock—

propagation, **XIII**, 728, 1160, 1161root rots, **XIV**, 131Nut(s), *see also* different types—climate and, **XIII**, 34grass (*Cyperus rotundus*) eradication, **XIII**, 582

growing—

manual, **XV**, 1529in Missouri, **XIV**, 1103in Pennsylvania, composition of, **XI**, 1090species of the Far East of Russia, **XIV**, 111varieties, register of new, **XV**, 440Nutmeg (*Myristica moschata*)—origin and distribution, **XI**, 1351root disease (*Rosellinia pepo*), **XII**, 246Nutrient(s), *see also* Fertilizers—absorption, pH effect on, **XII**, 1386accumulation in fruits, **XV**, 393concentrated, effect on beans, **XV**, 1176mineral, in relation to flower development, **XI**, 370

solutions—

chemical testing, **XIV**, 2007control of pH and nitrate in, **XII**, (39)differential effect in dark, **XIII**, (697)metaphosphate used in, **XIII**, (1138)oxygen pressure affects growth in, **XIV**, 61oxygen requirements in, **XII**, 746phosphorus availability in, **XV**, (432)purifying water for, **XV**, 419translocation related to root metabolism, **XIII**, 1117

Nutrition of plants—

apolar absorption and water content aspects of, **XIV**, 1022duckweed as test organism, **XIV**, 1015efficiency in, **XIV**, 1024experiments, importance of date of sampling, **XIV**, 71function of mineral elements in, **XV**, 1376horticultural, a manual, **XV**, (1493)a

SUBJECT INDEX

Nutrition of plants (*continued*)—

- investigation by artificial culture methods, XIV, 1011
- mineral, XIII, 1131; XIV, 2005
- organic, XI, 1022
- and pollen germination, XIII, 14
- size of particle of fertilizing element important, XIV, 1830
- what happens? XII, 737

Nutritive value—

- processing and, XV, 2015
- of tropical fruits, XIV, 919, 1393

Nux vomica in Tucumán, XII, 1583

Nyasaland—

- agricultural practices in, XII, (595)
- Agricultural Quarterly Journal*, Vol. 1, No. 1, XI, 1041
- Dep. Agric. A.R. 1939-1944, XI, (1054), 1519; XIII, (347); XIV, (426); XV, (1366), 2076

Nygmia phaeorrhoea, XIV, 1610*Nysius* sp. pest of rubber, XII, (1518)

Occasional publications of the Horticultural Education Association, XI, 780; XIV, 1439

Ocimum canum, see Camphor basil*Ocimum* sp., amphidiploidy induced by colchicine in, XII, 757, 758

Oechsle test for grape juice, XV, (2059)y

Oestrone as growth substance, XI, 1

Ohio agric. Exp. Stat. A.R. 1937/38, XI, (1054)

J. E. Ohlens Enkes Plantepatologiske Laboratorium A.R. 1941/42, XIV, 1108

Oidium—

- leaf disease of rubber, see Rubber, oidium on mango, XII, 261; XIV, 1923
- of vine, see Vine, powdery mildew

Oil—

- apple seed, XI, 1503
- apricot kernel, XV, 357
- avocado, XIV, 943
- Chaulmoogra, production, XIV, 1351, 1444, 1909
- citrus—
 - home production, XI, 1484
 - volatile, XV, (2059)a
- coconut, extraction, XI, 1486
- deposit determination, XIII, 554; XIV, 1852
- dips for preserving fruit, see Storage dips
- drying, production in British Colonies, XV, 2051
- essential, see Essential oil
- expression, vegetable, XII, (1142)
- in fennel seed, volatile, XIII, (656)
- geranium, XI, 1393
- grape pip, XII, 1546, 1547; XV, 358, 2054
- guanábana seed, from *Annona muricata*, XIII, (656)
- Isano, from *Ongokea kleineana*, XV, 2052
- from *Juniperus turcomanica*, XV, 356
- millet, XIV, (1431)
- mulberry seed, XII, 1548
- nettle seed, XII, 1549
- nut, British sources of, XV, 166
- olive, extraction, XIII, (1087)
- oil—
 - Alfonsia oleifera*, XV, 1292
 - Elaeis guineensis*—
 - breeding at Yangambi, XIV, 1924, 1925
 - history, cultivation and importance, XV, 1292

Oil palm (*continued*)—

- improvement in Cameroons, XIII, 286
- investigations in Malaya, XI, 592
- origin and distribution, XI, 1351
- plantation, establishing an, XIV, 1366
- pollination, artificial, XV, 1985
- research station, Benin, Nigeria—
 - A.R. 1939/40-1943/44, XIII, 666; XIV, 421; XV, 384
- work at, XI, 229; XIV, 421; XV, 940, 1293
- selection at Yangambi, XIII, 613
- soil cultivation systems, XI, 1426
- sterile, elimination of, XIV, 1924, 1925
- varieties in Bahia, XII, 649
- yield—
 - affected by lay out, XIII, 615
 - affected by varietal origin, XIII, 614
- Orbignya*, see *Orbignya*
- from pennycress (*Thlaspi arvense*), XIV, 705
- from Persian limes, XIV, 1995
- from plant material of recent origin, XIII, (1620)
- plants, see also palms, seeds and Essential oil—
 - Aleurites* see Tung
 - Asclepias syriaca*, XV, 1126
 - bud shedding, premature, in turnip and rape, XII, 1402
 - burweed (*Xanthium strumarium*), XII, 1404
 - Buxus sempervirens*, XV, 268
 - carbohydrate metabolism in, XIV, 1716
 - castor bean, see Castor bean
 - of central and north-eastern Europe, XII, 523; XIV, 698
 - Chenopodium* see *Chenopodium*
 - Cnidioscolus margravii*, XIII, 1017
 - Cucurbita* spp., XII, 527
- cultivation—
 - in Algeria, XV, 1726
 - in France, XV, 1725
 - in French Empire, XV, 1951
 - in Germany, XIV, (220), (710)
 - in Kazakhstan, XIV, 699
 - in Palestine, XI, 892
- Daphne pontica*, XV, 268
- of Dutch East Indies, research on, XI, 1352
- Eruca sativa*, XII, 944
- Eryngium maritimum*, XV, 268
- Erysimum cheiranthoides*, XV, 653
- Euphorbia* spp., XV, 359
- Euscaphis staphyleoides*, XV, 268
- Hamamelis virginiana*, XV, 268
- of India, XV, 1337
- Leptospermum citratum*, XV, 168
- Linum*, see also Linseed, XII, (1412); XIII, 1376, 1377
- Mallotus japonicus*, XV, 268
- Manihot carthagenensis*, XV, 268
- manuring, phosphatic, XII, 1403
- Mappia foetida*, XV, 360
- Melaleuca* spp., XV, 168
- Monardia fistulosa*, XV, 1363
- Moringa concanensis* seeds, XIV, 888
- olive, see Olive
- Ongokea kleineana*, XV, 2052
- Pelargonium radula*, XI, 1393
- pests, XIV, 215
- poppy, for details see Poppy, XI, 492; XII, 525, 526, 946, 1401, 1410; XIII, 169, 1375; XIV, 216-219, 709; XV, 1734, 1736, (1852)d

SUBJECT INDEX

Oil plants (continued)—

- Prunus laurocerasus*, XV, 1363
Pucnanthemum incanum, XV, 1363
 pumpkin, the Tschermak, XIV, 214
 rape, XI, 493; XII, 1401-1403; XIII, 899;
 XIV, 212, 1226; XV, 1727, (1852)d
 safflower, XIV, 707
Salvia splendens, XV, 268
Sapium sebiferum, XV, 268
 seeds—
 illustrations of, XII, 943
 from the Sudan, XV, 359
Solidago odora, XV, 1363
 in Soviet moist sub-tropics, XV, 268
Sterculia tomentosa, XV, 359
 sunflower, *see also* Sunflower, XI, (496);
 XIV, 213, 700
 in Switzerland, native, XI, 818
Thrips angusticeps pest of, XV, 167
Trichilia emetica, XV, 359
 tung *see* Tung
 turnip, XII, 1401-1403
 of the *Umbelliferae*, XII, 1368
 of the world, manual, XV, 1124
Xanthium strumarium, XII, 1404
 of tropical Africa, XIV, 1333
 poppy, *see* Poppy
 production—
 bibliography, XV, 2049
 in France, XIV, 211, 212
 research institute at Paris, establishment of,
 XV, 1984
 seeds, *see also* particular plants—
 analysis, XII, 1401
 content changed by iodine, XII, (1412)
 Garcinia echinocarpa, XII, 249
 in grain screenings, XIV, 704
 of *Mimosaceae*, XV, (2059)i
 phosphatides in, XIII, (1454)
 tea tree, in Australia, XV, 168
 tomato seed, XII, 1547
 Oiticica nut (*Licania rigida*)—
 cultivation, XV, 842
 curculionid pests, XIII, 605
 Okanagan Valley, apple growing in, XV, 977
 Oklahoma agric. Exp. Stat. bienn. Rep. 1942/44,
 XV, (946)
 Okra, *see* *Hibiscus esculentus*
Oligonychus ulmi, *see* *Paratetranychus pilosus*
 Olive—
 anthracnose (*Gloeosporium olivarum*), XIII,
 (109)
 bacterial disease (*Phytomonas savastanoi*),
 XIV, 577
 bark beetles (*Hylesinus* and *Phloeotribus*),
 XV, 1608
 biennial bearing, XI, 1341
 black scale on, XII, 1328
 boron deficiency, XIV, 122
 canned, slow freezing and thawing of, XIV,
 1427
 Cercospora fruit and leaf spot, XIV, 1146
 deficiency diagnosis by injection, XIV, 1111
 dehydration, XIII, (1067)
 floral sterility, XV, 1449
 fly (*Dacus oleae*), XIII, 1294; XIV, (1184);
 XV, 1416, 1613, 1614
 grafting in Algeria, XIV, 1493
 green, production of Spanish type, XIII,
 1612
 growing—
 in Argentina, regulations, XIV, (528)

Olive growing (continued)—

- in Libya, XIV, 470
 prospects in 1943 discussed, XV, 1416
 in S. Africa, XIV, 1050; XV, 47
 in Spain, varieties for, XI, 537
 in U.S.A., XII, 1283
 in Victoria, Aust., XII, 1213
 harvesting and packing pickling, XIV, 1544
 heterophyly in, XV, 992
 leaf scorch (*Stictis panizzei*), XV, 1592
 manuring, XV, 1478
 oil—
 extraction, XIII, (1087)
 production in Dalmatia, XIV, 1483
 and olive products, a world survey, XIII,
 1628
 origin, XII, 1214
 pest control, XIV, 1483
 picking, proper time for, XI, 538
 pickled, storage, XIII, 327; XIV, 373, (918)
 pickling, XI, (641); XIV, (918), 1544
 pollen vector, XII, (803)
 products and processing, XI, 638; XII, (311);
 XIII, 1628
 propagation, vegetative, XI, 893, 1339, 1340;
 XII, 1157; XIII, 731; XIV, 46, 495, (528);
 XV, 992
 pruning, XI, 894; XIV, 1529; XV, 1344,
 1462
 root-bearing swellings of, XIV, 1061, 1062,
 (1063)
 roots, XIV, (1063)
 storage, XIV, 373
 variety trials, XII, 1157
 Olonichenko's work in Siberia, XIV, 31
Omphalia root rot of date palms, XV, 1909
Ongokea kleineana, source of Isano oil, XV, 2052
 Onion—
 bacterial soft rot, XV, 2007
 blast, relation of weather conditions to, XIV,
 1253
 bloat, *see* eelworm
 bolting, factors affecting, XIV, 737; XV,
 1148
 Botrytis infections, XV, 687, 688, 691
 breeding, XI, 470; XIV, 741, 1251; XV,
 1352, 1761
 bulb—
 formation and flower production, XIV,
 237
 ripening, *Botrytis* and, XV, 687
 calomel for pest control in, XII, 487; XIII,
 511; XV, 1149, 1763
 cells, nuclear structure, electrolytes and, XII,
 (18)
 dehydration and vitamin content, XIV, 1405
 diseases, XI, (821); XIII, 860; XV, 1150
Ditylenchus dipsaci in seedlings of, XIII,
 (512); XV, 1149
 downy mildew (*Peronospora destructor*)—
 breeding for resistance to, XI, 470
 in California, XIII, 915
 drying, XI, 1007
 eelworm (*Ditylenchus* or *Anguillulina dipsaci*)
 control, XII, 958; XV, 603, 1149, 1763
 electric root stimulation, XIV, (746)
 the Ever-ready, XIII, 1401
 extracts, XIV, 1996
 fly control (*Delia (Hylemyia) antiqua*), XIII,
 511, 861, 1402, 1405; XIV, 241; XV, 692,
 1149
 genetics of, XIV, (1803)

SUBJECT INDEX

Onion (continued)—

- growing—
 - in California, XIV, 739
 - in England, XI, 106, 1209; XII, 486, 955; XIII, 912; XIV, 236, 737, 738, 1250; XV, 1145, 1148
 - in Minas Gerais, XI, (821)
 - in New Zealand, XIII, 508, 1397
 - in the Philippines, XI, 961, 1442
 - place in rotation in Connecticut, XIV, 238
 - in Queensland, XV, 1146
 - in South Africa, XI, (821); XIII, 1398
 - and marketing in S. Rhodesia, XIV, 742
 - in Russia, XIV, 740
 - in White Russia, XIII, 1400
- growth substances and root growth in, XI, 469
- growth varies according to previous crop, XV, 2077
- hail injury (simulated) reduces yield, XIV, 1735
- juice and bacterial growth, XI, (301)
- keeping quality, XI, 468; XIV, 1952; XV, 1325
- liquefaction, XI, 278
- losses of seedling, XII, (194)
- manuring, XI, 803, 961, 1442; XIII, 914, 1396; XIV, 960, 1734; XV, 1760
- market diseases, XII, 907
- metabolism, XV, 686
- neck rot (*Botrytis allii*), XV, 687, 688, 691, 2007
- nitrogen nutrition, XIII, 1396
- origin of, XIV, 1186, 1663
- and other edible alliums, XIII, 913
- Perennial Tree, a virus carrier, XV, 197
- pest control, XII, 487, 958; XIII, 511, (512); XV, 603, 1149, 1763
- photoperiod and temperature affect, XIV, 737; XV, 195
- physiological studies, XIV, 737; XV, 195
- plant bug control (*Psallus ancorifer*), XV, 1764
- polyploidy induced by paradichlorobenzene in, XIV, 243
- pungency, factors affecting, XI, 1240
- and related crops, cultivation, XIV, 236
- roots—
 - excised, exudation affected by cyanide, XIV, 1736
 - response to growth substances, XIV, 457
 - stimulation by electricity, XIV, (746)
 - water balance in, XI, (1092)
- salt detrimental to growth, XV, 1760
- seed—
 - production, XII, 162, 485; XIII, 510; XV, 1761
 - storage, XII, 1421; XIII, 509, 1562; XIV, 239, 1252
- seedling abnormalities, XIV, 1252
- sett—
 - internal morphology, XV, 195
 - production, XII, 954; XV, 1145
- shanking, XIV, 240, 1738
- single versus double digging for, XIV, 644
- smut (*Urocystis cepulae*), XI, 1241; XV, 690
- storage, XI, 983; XII, 671; XIII, 633; XIV, 917; XV, 383, 2007
- thrips—
 - control, XV, 937, 1147, 1762
 - evolution of onion resistant to, XV, 375
 - tartar emetic control of, XIV, 1737

Onion (continued)—

- types—
 - the Ever-ready, XIII, 1401
 - the Perennial Tree, XV, 197
 - the Welsh, XIII, 1401
- variations caused by unsuitable planting conditions, XV, 1761
- varieties—
 - American, XIII, 132
 - the Dungan, XIV, 743
 - Sweet Spanish hybrids, XIV, 1733
 - trials in England, XV, 1759
 - trials in Scotland, XIII, 507
- vernalization, XIII, 184, 1400
- virus—
 - on alliums generally, XV, (596)
 - a suspected, XV, 196
 - yellow dwarf, XIV, 1254; XV, 197
 - vitamins in dehydrated, XIV, 1405
 - vitamin C in, XII, 703
 - weed control, XII, 956, 957; XIII, 916, 399; XIV, 242, 744, 745; XV, 1765
 - the Welsh, XIII, 1401
 - white rot (*Sclerotium cepivorum*), XV, 6
 - wild (*Allium vineale*), XIV, 1162
- Ontario—
 - establishing a young orchard in, XIII, 77
 - fruit varieties recommended for, XIII, 75
 - horticultural experimental station, see Vinland
- Oospora pustulans*, XIII, 1355
- O-phenyl-phenol as disinfectant dip for citrus, XI, 270, (291)
- Ophideres* spp., XV, 305
- Ophiomyia pinguis*, XV, 1783
- Ophonus pubescens* (strawberry seed beetle—beneficial), XIV, 1610
- Opium—
 - from Roumania, XIV, 1234
 - production in Spain, XIII, 901
- Opuntia*—
 - aurantiaca* control in N.S. Wales, XV, 152
 - decumana*, XI, 606; XV, 1899
 - ficus indica*, see Prickly pear
- Orange—
 - acidity reduced by arsenic sprays, XI, 162; XII, 556; XV, 251
 - American bollworm pest of, XIV, 1328
 - biennial bearing, XII, 206
 - black spot, *Phoma citricarpa*, XI, (872)
 - blemishes, detection by ultra-violet rays, XII, 1527
 - blood, colour intensity in, XII, 993
 - bronzing and frencing, zinc and magnesium effect on, XI, 860
 - in Burma, survey, XII, 202
 - Chinese, XIV, 961
 - Clementine—
 - cultivation, XIII, 966; XV, 1194
 - non-setting and remedies for, XIII, 964, 965, 967; XIV, 2016
 - rootstocks, XIII, 965, 966
 - seeds in, XI, 511
 - consumer demand in Eastern U.S.A., XIV, (1545)
 - cultivation methods—
 - in California, XIII, 1464
 - the Hinckley, XI, 148
 - cuttings, sour, XII, 204
 - decline, relation of rootstock to, XV, 12
 - dipping in disinfectant before storing, XI, 270, 291
 - disease a new, in São Paulo, XIV, 310

SUBJECT INDEX

Orange (*continued*)—

diseases not discernible by ultra-violet rays, XII, 1527

Dream Navel patented, XIV, 1820

external spot (*Septoria* sp.), XI, 155

frost damage, XV, 1205

fruit—

composition and quality, XV, 930

composition, rootstock effect on, XIII, 1467

drop—

following oil spray, XIV, 844

in navel, XI, 154, 865

in Valencia, XIII, 248

effect of oil spray and HCN on, XII, (1480)

fumigation, HCN absorption, XV, 262, 795

Glomerella disease of, XI, 866

grafting of Sathgudi, XIV, 836

graft, the de Setubal sour, XIII, 1468

granulation of Valencia, XIII, 251; XV, 796

growing in Tucumán, XII, 1583

growth substances and, XII, 204

gummosis, XI, 526

helione (di-hydrochloride of di-amino benzene) injection for disease control, XIII, 801, 802

incorporation in soil stimulates *Azotobacter*, XII, 1470

insecticides and quality of, XIV, 1328

Jaffa [=Shamouti], rootstocks for, XI, 513

juice—

changes during processing and storing, XIV, 1989

manufacture, XII, 298, 299, 1114; XIV, 941; XV, 1322, 2048

insecticides affect, XV, 796

maturity affects, XIII, 962

pasteurization, XI, (641)

petrol-ether soluble material in, XI, 300

seasonal changes in, XI, 839

tangerine, XIV, 941

Khasi, rootstocks for, XIV, 1822

leaf fall and fruit rot disease (*Phytophthora palmivora*), XV, 1208

Malta, sunburn, XIII, 1476

mandarin, climate affects distribution in Argentina, XIV, 299

manuring, *see also* Citrus, XI, 149, 512, 861, 862; XII, 207, 554; XIII, 1475; XIV, 302; XV, 246, 1197

marmalade of high vitamin C content, XII, (1142)

moth (*Gymnandrosoma* sp.), XII, 1007

navel-end-rot (*Alternaria citri*), XI, 154, 865

navel—

splitting of, XV, 790

water spot of, XII, 1002; XV, 1889

nectar and pollen, bee activity and, XIII, 547

Nectria cancri on, XII, 217

nitrate absorption in culture solutions, XII, 1466

nutrient elements present in, XI, 512

oil spraying, XIV, 844; XV, 1889

organic acid content, XV, 781, 893

peel oil and water spot, XV, 1889

Pineapple, observations on, XV, 930

pink disease (*Corticium salmonicolor*), XII, 562

potassium—

affects growth, XI, 861

deficiencies, XV, 1203

pruning, XIII, 548, 972, 1469; XIV, 306; XV, 66, 787

Orange (*continued*)—

quality in Louisiana and elsewhere, XII, 552

rehabilitation in Tucumán, XIV, 1316

repacking, and *Penicillium digitatum* infection, XI, 273

ringing, XI, 1312; XIV, 1833

root—

disease, XI, 157

pruning, XI, 1312

rootstocks, XI, 513, 839, 862; XII, 1462, 1579, 1583; XIII, 965, 966, 969, 1467, 1468; XIV, 961, 1822, 1824; XV, 248, 1200, 1201

rots, control of various, XV, 1893

Sangtra, sunburn, XIII, 1476

sirocco effects on, XIII, 960, 961

seedlings, response to chloride and hydrogen ions, XII, 998

shade trees for, XII, 993

Shamouti [=Jaffa], rootstocks for, XI, 513

soils of Carcagente, XII, 1008

sooty blotch, *see* Citrus

stem end rot (*Phomopsis* and *Diplodia*), XV, 793, 1206, 1893

storage—

in Australia, XIV, 1383

in Florida, XV, 930, 931

Malta, XIII, 1045

mandarin, XIV, 1382

Nagpur, XIII, 308

rot control—

by disinfectants, XI, 270; XV, 874

by rays, XV, 930, 931

Sangtra, XIII, 1045

sweet, XI, 978; XII, 668

tangerine, XI, 978

in Uruguay, XIV, 1382

sunburn of Malta and Sangtra, XIII, 1476

of Szechuan, the sweet, XIV, 1317

thinning, XI, 854

tortrix (*Argyrotaenia citrana*), XII, 1476

Valencia—

changes in composition during development, XV, 781

cultivation, XIII, 1464

fruit drop, XIII, 248

granulation in, XIII, 251; XV, 796

vitamin C in, XI, 268, 843, 860; XIII, 963

Washington Navel improvement, XIII, 544

waxing, XIV, 1947

worms, XIV, 1847

wraps for, XI, 269, 272

yield adjustment in experiment with, XIII, 1475

Orbignya spp. in Brazil, XII, 588; XIV, 355; XV, 1292

Orchards, *see also* Fruit growing—

establishing—

in Ontario, XIII, 747

in S. Africa, XV, 976

manuring, *see* Manuring, fruit

neglected, renovation of, XII, 108, 109;

XIII, 748, 1179; XV, 1477

in Rhodesia, home, XIII, 377

valuation, XII, 782

Orchid plant bug (*Tenthecoris bicolor*) control, XV, 819

Orchids, vitamins affect germination and growth, XIII, 952

Oregon—

fruit regions in, XII, 788

State Horticultural Society A.R. 1943, XV, 944

SUBJECT INDEX

- Organic acids in plants, oxygen and, XV, 402
- Organic matter, stimulation of plant growth by, XV, 21
- Oriental fruit moth (*Cydia (Grapholitha) [Laspeyresia] molesta*)—
Australasian work, XII, 1147
control—
biological, XI, 83; XII, 127; XIV, 1159, 1630, 1655; XV, 1624, (1658)a, (1658)d
chemical, XII, 455, 878, 1322; XV, 1623
fumigation with methyl bromide, XIII, 451
mechanical, XIV, 145
damage affected by proximity of apple trees, XIV, 1629
- Oriental peach moth, *see* fruit moth
- Origin—
of cultivated plants, XIV, (458)
of cultivated European tree fruits, XV, 975
of new forms, XIII, 1102
of vegetables, XIV, 1186
- Orissa agric. Dep. A.R. 1936/37-1939/40, XII, (1164), 1579
- Ornamental(s)—
gardening textbook in Russian, XV, (245)
shrubs, manuring, XII, 536
trees—
in Great Britain, XIV, 830
manual on care of, XIII, 337
pests of, XI, 762
cultivation in gravel, XII, 535
cuttings, rooting media for, XI, 1290
diagnosis of nutritional requirements in, XIV, 1804
diseases, XIV, 413
herbaceous perennials in North Carolina, XII, (1460)
medicinal properties of some, XI, (1300)
mites on, XIV, 1814
pests, XIV, 413; XV, 1854
research in Canada, XIV, 953
of Rio Grande Valley, Texas, XIII, (956)
sub-tropical, propagation, XI, 1337
for S. Rhodesia, XIV, 1874
for Texas, XII, 1495
utilization of some, XIV, 1300
winter hardiness of woody, XII, 985
- Orobanchae—
attacking economic crops, XIII, (1369)
ludoviciana parasitic on tomato, XIII, 938
- Orthodichlorobenzene for soil sterilization, XIV, 777
- Orthosiphon grandiflorus*, a medicinal plant, XI, 1399
- Oryctes rhinoceros* pest of coconut, XI, 954
- Osmosis, XIII, 686; XIV, (1030)
- Osmotic—
concentration during water absorption, XIV, 443
values of polyploids, XIV, 441
- Von Osten apple orchard, fertilizer data from, XIII, 1183
- Otiorrhynchus singularis* on apple fruits, XIV, 1610
- Overgrowth at union in cherries, XII, 1221
- Ovulinia azaleae*, XII, 984
- Oxalis deppei* as food plant, XIV, 1249
- Oxidation reduction condition of plants with reference to their resistance to fumes, XV, 958
- Oxygen—
dormancy in seeds affected by, XV, 1384
- Oxygen (*continued*)—
importance—
for ion absorption, XIV, 1012
in nutrient substrates, XV, 402
tension, response of tomato to, XIV, (1030)
- Oyster nut (*Telfairea pedata*), XI, 590
- Pachyrhizus* spp., *see* Yam bean
- Packing—
apples, *see* Apple
boxes, corrugated paper, XIV, 1377; XV, 866, 934
citrus, XI, 292, 293
crates, collapsible vegetable and fruit, XV, 314
fruit, *see also* particular fruits—
in Argentina, XIII, 769
in Queensland, XIV, 1933
in Sweden, XIV, 91
in U.S.A., XIII, (1067)
grapes, *see* Vine, grape
house construction, XV, 1359
lettuce, XI, 280
peaches, *see* Peach
pears, XIV, 1373
plums, *see* Plum
rubber, XI, 1413
stacking of boxed fruit, XI, 968
tropical fruits and strawberries, XV, 849
vegetable, XI, 1509; XIV, 642
- Palaquium* spp. as insecticidal plants, XIV, 1657
- Palaecrita vernata*, XII, (462)
- Palestine—
citrus industry in war, XI, 840-842; XII, 1157
Dep. Agric. A.R. 1940/41, 1941/42, 1939/40, 1942/43 and 1943/44, XII, 1157; XIV, 422, (426), (2030); XV, 942
new field crops for, XI, 1349
problems, horticultural, XIV, 1034
- Palestinian plants, *Ficus sycomorus*, XI, (171)
- Palm—
the babacu, *Attalea speciosa*, XV, 856
of Bahia, Brazil, XII, 1083, 1084
corozo oil (*Alfonsia oleifera*), XV, 1292
ivory (*Phytelephas* sp.), XII, 1016
oil, *see* Oil palm
oil carotenoids, XI, (641), XII, (311), XIV, (412)
- Pan *see* Piper beetle
- Panama—
Canal Zone Experiment Gardens, XIV, 1883
flora, XII, 1019
- Panax ginseng*, XV, 657
- Pancratium maritimum*, a flowering plant for saline soils, XV, 239
- Pantamorus godmani*, the rose weevil, XV, 259
- Papaver*, *see also* Poppy
- Papaver somniferum*, polyploids induced by colchicine in, XII, (1412)
- Papain—
activity retention, XII, 706
extraction from papaw, methods, XIV, 425, 896; XV, 808
notes on Australian produced, XIV, 396
- Papaw, American (*Asimina triloba*), hybrids of, XI, 1097
- Papaw (*Carica papaya*)—
bunchy top disease, XIV, 423; XV, 386
chromosome doubling with colchicine, XII, 233
constituents and flavour, XI, (891)

SUBJECT INDEX

- Papaw (*Carica papaya*) (*continued*)—
 cultivation—
 as an annual in Texas, XV, 1363
 in Brazil, XV, 808
 in Florida, XI, 539, 1348; XV, 1910
 in Hawaii, XII, 266
 in Malaya, XI, 1432
 in Tanganyika, XIV, 896
 in United Provinces, India, XIV, 1336
 cytology, XV, 380
 diseases, XI, 890; XIV, 897, 1869
 fruit grading, XI, 1447
 harvesting and packing, XV, 849
 improvement in Queensland, XII, 1088
 investigations in Hawaii, XIII, 1632
 leaf spot diseases (*Phyllosticta sulata*), XV, 1911, (1914)g
 Mediterranean fruit fly infests, XIII, 1497
 morphology and cytology, XIV, (325)
Phytophthora parasitica on, XIII, 265
 products, XV, 908
 proteolytic activity, XV, 307
 sex—
 distribution in, XII, (587)
 variation in, XIV, 1337
 storage, XI, 617, 980; XII, 1528
 topworking male, XI, 540
 vegetative propagation, XV, 2072
 virus disease in Tucumán, XIV, 1450
- Paper—
 plants, *Cladophora* spp., XV, 146
 possibilities in West Africa, XIII, 1505
- Papery bark canker, relation to silver leaf, XIII, 1273; XIV, 1600
- Paprika, *see also Capsicum annuum*—
 ascorbic acid content, XIV, 696
 cultivation, XIV, 636, 695, 696
 processing, XIV, 696
- Paradichlorobenzene—
 fumigation of sweet potato, XIV, 859
 to induce polyploidy, XIV, 243
 vapour for tobacco mildew control XI, 130, 1285, 1286
- Parasites and predators of insect pests, catalogue of, XIV, (1185)
- Paratetranychus—
citri, XI, 1330; XIII, 561, (562); XIV, 1325
coiti, XIII, 996
pilosus, *see also* Red spider, XI, 1176; XIII, 1097; XIV, 1148, 1451, 1610; XV, 569, (1071)
viridis on pecan, XIII, 1288
- Paratriozia cockerelli*, XII, 1388; XIV, 938
- Paria canella*, fumigation with methyl bromide, XII, (1328)
- Parkia*, pests of, XI, (965)
- Parlatoria blanchardi*, XII, 231
- Parsley a source of vitamin C, XII, 1448; XIII, 1064
- Parsnip—
 diseases, XII, 147
 fertilizers, phosphatic, XIII, 459
 vitamin C content, XI, 105
 weed control, XIV, 744, 1703
- Parthenium argentatum*, *see* Guayule
- Parthenocarpic fruits, chemical composition compared with that of normal, XIII, 167
- Parthenocarpy—
 in citrus, induced, XI, 852; XII, 995
 in cucumber, XIV, 255
 induced—
 by frost in pear, XII, 1293
- Parthenocarpy, induced (*continued*)—
 by growth substances, XI, 475, 1064; XII, 7, 168, 175; XIII, 202, 1425, 1552; XIV, (297), 1504, 1535, 1553, 1762; XV, 14, 721, 722, 937, 1809-1811, 2024
 natural and artificial, XIII, 13
 research at John Innes Institution, XI, 1032; XII, 712
 in tomato, *see* Tomato, growth substances
- Passion fruit—
 brown spot (*Alternaria passiflorae*), XI, 534; XII, 863
 grease spot (*Phytophthora passiflorae*), XV, 1572, 2075
 growing—
 in Auckland, N.Z., XIII, 776
 in Queensland, XV, 1216
 in tropics, XV, 304
 marketing, XI, 535
 nutritive value, XIV, 1393
Septoria passiflorae disease, XIV, 1144
 woodiness, XI, 534; XV, 547
- Patagonia, phytogeography, XIV, (458)
- Pathology, Plant—
 teaching and research, XV, 1536
 in Western Australia, XV, 1538
- Pauridia peregrina* parasite of mealybug, XIII, 1014
- Pea—
 anthracnose (*Colletotrichum pisi*), XIV, 288; XV, (598)
 aphides (*Illinoia pisi* and others), XI, 1274; XIII, 1451; XIV, 813, 1293, (1803); XV, 1183, (1185), 1847, (1852)o
 ascochyta blight, XI, (821); XII, 981, 1446
 Blue Prussian, cultivation in W. Australia, XIV, 806
 blue—
 production in Victoria, XIII, 1449
 standards for, XIV, 286
 boron effects on, XIV, 811
 calcium effect on, XIII, (1454)
 canned—
 green colour preservation in, XIII, 651; XIV, 2018
 poisonous weed contaminants of, XIV, 1292
 vitamin C content, XV, 1331
 the chick (*Cicer arietinum*), XII, 1447
 classification of English garden, XII, 1445
 composition of raw and canned, XIV, 411
 cucumber mosaic on, XI, 807
 damping off, XIII, 944; XV, 1773
 deficiency symptoms, XIV, 810; XV, 1546
 diseases—
 in Idaho, XV, (1852)u
 market, XII, 907
 downy mildew (*Peronospora pisi*), XV, 1846
 dried, vitamin C content, XIII, 1064
 for drying, XII, 518, 519
 the Edua (*Mucuna edulis*), XI, 909
 fertilizer experiments, XII, (1454); XV, 225, 1845
 field, new, from N. Zealand, XIII, 534
 foot and root rots, XIII, 860; XIV, 1801
 frozen pack, XI, 287-289, (291), 976; XII, (674); XIII, 301
 grafting experiments, XIII, 941
 growing—
 in Finistère (petits pois), XV, 1844
 in N.S.Wales for canning, green, XIV, 285
 in Tasmania for canning, green, XV, 1841-1843

SUBJECT INDEX

Pea growing (*continued*)—

- in Victoria, Aust., blue, **XIII**, 1449
- in W. Australia, blue, **XIV**, 806
- harvesting technique, **XV**, 1181
- injuries sustained in experimental fields in Germany, **XI**, (1278)
- inoculation of canning, **XIII**, 1450
- leaves, enzyme action studied in, **XIV**, 1291
- manganese deficiency, *see also* marsh spot, **XI**, 1272
- manuring, nitrogenous, **XV**, 225
- marsh spot, **XI**, 1272; **XII**, 186
- mosaic affects yield, **XIV**, 287
- moth (*Laspeyresia nigricana*), **XIII**, (1572); **XIV**, (1298)
- nitrogen effect on, **XIII**, (1454)
- nut, *see* Groundnut
- nutrition—
 - potassic, **XIV**, 1290
 - rare earths in, **XIII**, 535
 - studies, **XIV**, 810
- pests, *Heliothis armigera*, **XV**, (758)
- Pigeon, *see* Pigeon pea
- rare earths affect growth, **XIII**, 535
- in relation to Australian agriculture, **XV**, (1852)a
- rots, soil-borne organisms causing, **XIV**, 812
- salting, **XIV**, 1998
- sand culture trials, **XIV**, 810
- seed—
 - composition of fresh and dry, **XV**, 2031
 - fungi attacking in soil, **XI**, 1273
 - inoculation, **XIII**, 942, 946
 - production—
 - in Canada, **XI**, 1271
 - in Germany, **XII**, (520)
 - treatment, **XIII**, 228, 533, 943, 944; **XIV**, 1800; **XV**, 223, 224, (598), 1182
- seedlings, growth inhibition in, **XV**, (1852)i
- selection and breeding in N. Zealand, **XIV**, 1797, 1798
- soil moisture and, **XIV**, 808
- spacing optima, **XIV**, 283
- temperature deciding factor in growth, **XIV**, 807, 809
- test, growth substances and, **XI**, (1067); **XII**, (765)
- thiamin content of fresh and cooked, **XIV**, (2003)
- varietal reaction to *Septoria pisi*, **XII**, 980
- varieties—
 - American garden, **XIII**, 132
 - in Tasmania, **XIII**, 940
 - variation in, **XIV**, 284
- viruses, **XV**, 1846
- vitamins A and B in frozen pack, **XI**, 287-289
- weevil, *Bruchus pisorum*, **XII**, 1147; **XIV**, 814, 815, 1953
- zinc deficiency symptoms, **XIV**, 1799

Peach—

- aphid, green, *see Myzus persicae*
- arsenic injury, **XIII**, (845), 1097
- bacterial canker (*Pseudomonas mors-prunorum*), **XII**, 1307
- bacterial spot (*Xanthomonas pruni*), **XIV**, 1133; **XV**, 1570
- bagging, **XIV**, 573
- blight (*Coryneum beijerinckii*), **XIII**, 108
- breeding, **XV**, 451-455, (1006), 1352, 1363, 1420
- brown rot, **XII**, (864); **XIV**, (635); **XV**, 1580, 2075

Peach (*continued*)

- bud mutation, **XI**, 704
- calico, a virus, **XIV**, 1593
- canning, **XI**, 302; **XIV**, 1946, 1982
- for canning, manuring of, **XI**, 1115
- cherry yellows on, **XIII**, (101)
- chilling requirements, **XII**, 60, 61; **XV**, 454, 455, 458
- chlorosis, **XIV**, 1059
- cold resistance of buds in, **XIV**, 1587, (1662); **XV**, 456, 1023
- constriction disease (*Diaporthe perniciosa*), **XII**, 442
- cordons, **XV**, 1000
- cover crops and soil management, **XII**, 1256; **XIII**, 667; **XIV**, 511, 512, 1518, (1545); **XV**, 567, 1348
- cross, greengage \times , **XIV**, 489
- cuttings, **XV**, 944
- dehydration, *see* drying
- diseases—
 - Fermate to control, **XIV**, 134
 - of harvested, **XIV**, 583
 - dormancy broken by spraying, **XII**, 73
 - drying, **XI**, 1473; **XII**, 683, 1124; **XIII**, 1061; **XIV**, 931; **XV**, 2075
- dwarf seedlings, **XV**, 996
- embryo—
 - abortion, mathematical model, **XII**, 1244
 - cultured seedling, light and temperature effects on, **XIV**, 490
- ethylene dichloride injury, **XIV**, 160
- excised embryo tests of germination, **XV**, 457
- flower—
 - initiation, **XII**, (1246)
 - size and type inheritance, **XII**, (1246)
- flowering, growth substances to accelerate, **XII**, 394
- frost—
 - damage to, **XII**, 1294; **XIV**, 69
 - resistance, *see* cold resistance
- frosty mildew (*Cercospora persicae*), **XIV**, 582
- fruit—
 - acidity and tannin content, **XII**, (1246)
 - bud development, **XIV**, 66
 - composition, **XII**, (85); **XIII**, 390
 - fall and its prevention, **XI**, 719; **XII**, 1265
 - relation between diameter and fresh weight of, **XII**, (1246)
 - size and colour, factors affecting, **XII**, 393, 1254; **XV**, 1467
- growing—
 - in Argentina, **XIV**, 469, (1083); **XV**, 42
 - in Arkansas, varieties, **XII**, 44
 - in Baluchistan, **XI**, 945
 - in Illinois, **XV**, 934
 - in Italy, new varieties for, **XI**, 703
 - in Michigan, **XII**, 43
 - in Washington, **XII**, 787
- herbicides for, **XV**, 1645
- host of potato virus vector, **XII**, 477
- identification by leaf, **XII**, (85)
- inherited characters, **XIII**, (45); **XV**, 452
- insecticides and herbicides for, **XV**, 1645
- interval between flowering and fruit maturity, **XII**, 1240
- juice processing, **XIII**, (335)
- leaf—
 - curl (*Taphrina (Exoascus) deformans*), **XII**, 1308; **XIII**, 108, 426; **XIV**, 1609; **XV**, 564, 1053, 2075

SUBJECT INDEX

Peach leaf (*continued*)—

- measurement in, XII, 67
- morphology, XI, 38
- phosphate content, XIII, 1184
- little leaf disease, XI, 421, 753, 1149; XIII, 1246; XIV, 563, 1576
- longevity, XII, (85)
- manganese deficiency in, XI, 1150; XV, 2075
- manuring, XI, 53, 1115; XIII, 1184, 1185; XIV, 1068, 1070, 1514; XV, 60, 484, 1476
- marketing in Illinois, XIII, 768
- mealybug (*Pseudococcus comstocki*), XIII, 1292
- Monilia cinerea* on, XIII, 426
- mosaics, XI, (779); XIV, 1594; XV, (597), 1026
- moth, oriental, *see* Oriental fruit moth
- nematodes, XIV, 1612; XV, 567
- nitrate of soda affects development, XIV, 1068
- nitrogen accumulation from different sources, XV, 484
- NPK relations in young, XIII, 1182
- orchards, plum curculio survival in, XV, 1606
- origin of cultivated, XV, 975
- packing, XI, 620; XIII, 625, 1040; XIV, 1375; XV, 867, 1359
- pests, XI, 761; XIV, 587
- phosphatic nutrition, XIII, 1184
- picking times—
 - in Canada, XI, 1452; XIV, 67, 1376
 - in S. Africa, XII, 279
- pollen sterility, XV, 452
- pollination, part played by bees, XIII, 742
- precooling, XIII, 625; XV, (2011)b
- pre-storage treatment with acetylene, XI, 261
- propagation by pits, XII, (1226)
- provitamin A affected by processing, XIII, 321
- pruning, XII, 1258; XIII, 756, 1190; XIV, 511; XV, 1461
- respiration affected by presence of other peaches, XI, 262, 263
- ripeness, optimum, *see* picking
- ripening prior to canning, XIV, 1982
- root knot, Shalil rootstock useful against, XIV, 1612; XV, 1358
- roots affected by—
 - pruning, XIII, 1190
 - compactness of subsoil, XIV, 90
- rootstocks—
 - in Germany, XIV, 496
 - in Italy, XII, 799; XIV, 501
 - nematode-resistant, Shalil, XIV, 1612; XV, 1358
 - plum for, XI, 44; XII, 40; XIV, 1060
 - and reaction to chlorides and sulphates, XIII, 1185
 - soil properties affect, XIV, 1059
 - in South Africa, XIV, 1060
- in sand culture, effect of N and P on, XII, 399
- seed—
 - dwarf seedlings of non-after-ripened, XV, 996
 - germinability tests, XV, 457
 - injurious effect of peach juice on, XII, 1238
 - stratification, XIV, 1188
 - treatment, XI, (737); XV, 1432
 - variations, XV, (505)
- shot hole (*Clasterosporium carpophilum*), XIII, 426
- soil—
 - management, XII, 1256; XIII, 667; XIV, 90, 511, 1516, 1518, 1520; XV, 2077

Peach, soil (*continued*)—

- moisture and size of fruit, XII, 1254
 - split pit, XII, (138)
 - spray injury from arsenic, lime used to prevent, XV, 118
 - spraying with arsenates, XIV, 626
 - storage, XI, 261-263, 613, 971, 1452; XII, 279, 1146, 1147; XIII, 625; XIV, 909, 1376, 1381, 1945, 1946; XV, 374
 - sulphited, preserves from, XIII, 1043
 - sunscaid, XV, 91
 - suture spot, XIII, 806
 - thinning—
 - effects of, XII, 72; XV, 1467
 - by pole, XIV, 1538
 - by sprays, XV, 496, 1359
 - training, XII, 68; XV, 1464
 - transpiration rate compared with that of citrus, XII, 1243
 - tree borer (*Sannioidea exitiosa*) and control, XI, 84; XIII, 1303; XIV, 600, (635), 1631; XV, 577, 1628
 - trunk injuries and potash content, XV, 1549
 - varieties—
 - in Argentina, XV, 365
 - the Boland, XIV, 1490
 - Californian, in Baluchistan, XIV, 478
 - for canning, XIV, 1047-1049, 1489
 - for citrus belt of California, XV, 458
 - ornamental, edible, XV, (1006)
 - for Pennsylvania, XIII, 1157
 - Redhaven, XI, 37
 - resistant to leaf curl, XV, 2075
 - for sub-tropics, XIV, 1046
 - in Washington, XIV, 477, 1047
 - virus diseases, XI, 754; XII, 111, 112, 851, 852; XIV, 570, 1123, 1593, 1594; XV, 374, (598)
 - wart (*Galla verrucae*), XIII, 424
 - woolliness, XII, 279
- Pear—
- aphid (*Yezabura pyri*) on, XV, 104
 - blossom blight (*Pseudomonas prunicola*, *Sclerotinia laxa*, *Bacillus barkeri*), XI, 1163; XII, 1302
 - blossom weevil (*Anthonomus pyri*), XI, 766; XIV, 142
 - boron deficiency in, XIII, 420
 - breeding, XII, 1210; XIV, 486; XV, 1352
 - canker (*Nectria galligena*), XII, 1302
 - canning, XI, 1474; XII, 689; XV, 503
 - chlorosis, XIV, 1059
 - coding moth in, XIII, 828; XIV, (1184) 1610, 1625
 - cordon cultivation, XIII, 49; XV, 1000
 - cork spot, XV, 945
 - corky lenticels, bagging affects, XI, 47
 - clusters and set of fruit, XIV, 57
 - cuttings, XIII, 730
 - dehydration, XV, 2075
 - diseases in Washington State, XIII, 1278
 - double working, XIV, 55, 56, 502, 1502
 - dried, waste for pigs, XII, 1557
 - exports from S. Africa 1930-9, XII, 827
 - fireblight (*Erwinia amylovora*), XI, 1164, 1165; XIV, (547), 1596
 - flower size in relation to position, XI, 1109
 - flowering—
 - dates, XI, 1032; XIII, 1174; XIV, 58
 - growth substances to accelerate, XII, 394
 - frameworking, XIII, 47; XV, 991
 - frost damage, XII, 1285, 1293

SUBJECT INDEX

Pear (*continued*)—

fruit—

bud formation, **XI**, 396; **XII**, 1245
 diseases and blemishes, **XIV**, 578
 drop and prevention, **XI**, 1108-1110; **XII**,
 808, 1268; **XIV**, 522; **XV**, 71, 1543

set, **XIV**, 57

genetical studies in, **XII**, 386, 387

growing—

in England, manual, **XIV**, 949
 on the Rio Negro, Argentina, **XI**, 702
 in Washington, **XIV**, 1481

growth—

cycle, **XII**, 1245
 soil moisture and, **XII**, 66
 identification of non-bearing, **XV**, 981
 injection and mineral deficiencies, **XI**, 1110
 irrigation, **XII**, 825
 juice residue disposal, **XIV**, 390
 leaf and fruit spotting (*Elsinoe piri*), **XV**, 1579
 market prices and supplies of Williams, in
 California, **XII**, 1216
 mite control with xanthone, **XIV**, 1625
Monilia rots, **XI**, 1162; **XII**, 443
 non-setting in, reasons of, **XI**, 1108-1110;
XII, 1245; **XV**, 1543
 ontogeny, age modification and anomalies,
XII, 1211
 origin and evolution of cultivated, **XII**, 1210;
XV, 975
 packing, **XIV**, 1373
 parthenocarpy, **XII**, 712, 1293; **XV**, 1809
 phenological observations at Geisenheim on,
XI, 395
 phosphorus deficiency, **XIII**, 1252; **XV**, 375
 pollination, **XI**, 45, 717, 1105, 1106; **XII**,
 386, 387, (388), 389; **XIII**, 665, 1174;
XIV, 58; **XV**, 40
 polyploidy and winter hardiness in, **XIII**, 389
 premature autumn coloration, **XV**, 1574
 pruning, **XI**, 730; **XIII**, (67)
 psylla (*Psylla pyricola*), **XII**, 123, 1319;
XIV, (635)
 : quince incompatibilities bridged, **XIV**, 1502
 ringing, **XIV**, 459

ripeness—

necessary for canning, **XV**, 503
 period elapsed from full bloom an index of,
XI, 736
 ripening—
 by acetylene, Williams', **XI**, 257
 after storing, **XII**, 278
 rooting media for, **XII**, 1231
 rootstocks—

Amelanchier vulgaris as, **XIV**, 48
 in Australia, **XII**, 1146, 1147; **XV**, 1348
 in Caucasus, quince, **XIII**, 739
 French, quince, **XV**, 995
 in India, **XIV**, 961; **XV**, 936
 at Long Ashton, **XV**, 1443
 mountain ash, *see* Sorbus
 pears, seedling and clonal, **XII**, 1146, 1147;
XIV, 1055; **XV**, 1348
Pyrus amygdaliformis, **XI**, 383
Pyrus betulaefolia, **XIV**, 1596
P. calleryana, **XII**, 1147; **XV**, 1348
P. salicifolia, habitat and biology of, **XIII**,
 1172
 quince, **XIII**, 739; **XIV**, 961; **XV**, 936,
 995, 1443
 soil properties affect, **XIV**, 1059
Sorbus spp., **XI**, 388; **XIII**, 384

Pear rootstocks (*continued*)—

in Sweden, **XV**, 466
 scab (*Venturia pirina*), **XI**, 1169; **XV**, 559,
 1029
 scald related to oil spray, **XI**, 73
 seed stratification, **XIV**, 1188
 seedlings, vigour in, **XIII**, 719
 soil—
 moisture influences growth and fruit size,
XII, 66, 1254; **XIII**, 1193
 water control, in Florida, **XV**, (505)
 sooty blotch, **XIV**, (547)
 spray calendar for Nova Scotia, **XV**, (1071)
 spraying to check pre-harvest drop, **XII**, 808,
 1268; **XIV**, 522; **XV**, 71
 stony pit virus, **XV**, 92
 storage—
 in Australia, **XII**, 1146, 1147; **XIII**, 1037,
 1630
 delayed, **XI**, 257
 ethylene production during, **XII**, 1525;
XIV, 1943
 gas, **XI**, 256; **XII**, 666; **XIII**, 305; **XIV**,
 907, 1380, 1943
 Lausanne trials, **XII**, 664, 1097
 in New Zealand, **XIII**, 344, 1633
 oil sprays affect, **XV**, 873
 in the Punjab, **XII**, 665
 ripening after, **XII**, 278
 vitamin C influenced by, **XI**, 1451
 in Washington, **XIV**, 1481
 water deficits affect, **XV**, 541
 waxed paper linings, **XIII**, 344
 Swedish imports of, **XV**, (505)
 tetraploidy induced by colchicine in, **XII**, 794
 thinning, **XI**, 733
 training—
 by "arcure" method, **XIII**, 50
 cordons, **XIII**, 49; **XV**, 1000
 varieties—
 in Celjabsink, U.S.S.R., **XIII**, 1152
 cropping two or three times a year, **XIV**,
 42, 1043
 English, **XV**, 41, (1006)
 of Far Eastern U.S.S.R., **XIII**, 1151
 identification in nursery, **XV**, 981
 Packham's Triumph, **XIII**, 40
 perry, **XV**, 980
 S. African, **XIV**, 1044
 Swedish, **XIV**, 471-473; **XV**, 913
 in Turkey, **XIV**, (1545)
 Williams', in Argentina, **XI**, 702
 Williams', pollination in N.S. Wales, **XI**, 717
 vitamin C in stored, **XI**, 1451
 a wild, *P. amygdaliformis*, **XI**, 383
 wilt control by wrapping, **XII**, 1100
 yields at East Malling, **XIV**, 1482
 Peasant agriculture in Trinidad, **XIV**, (1932)
 Peat—
 compost investigations at Macaulay Institute,
XIII, 368; **XIV**, 1443; **XV**, 1354
 fertilizer, "huminal B", **XV**, 25
 medium good as surround for pot plants,
XV, 762
 nature and horticultural value, **XI**, 1091
 for propagation purposes, **XI**, 1508; **XII**,
 350; **XIII**, 368, 369
 as top dressing, **XIV**, 960
 used at transplanting, **XV**, 1436
 and its uses in agriculture, **XV**, 463
 in vegetable production as soil supplement,
XIV, 174; **XV**, 935

SUBJECT INDEX

- Pecan**—
 boron for, **XI**, 743
 casebearer, *see* nut casebearer
 cuttings—
 grafting to facilitate rooting, **XII**, 1281
 growth substances for, **XIV**, 1564
 deficiency symptoms in, **XIII**, 1249
 delayed foliation and dormancy breaking, **XII**, 90; **XIII**, 1232
 downy spot (*Mycosphaerella caryigena*), **XII**, 119
 fertilizers and manures, **XII**, 416; **XV**, 523
 fruit set—
 growth substances affect, **XIV**, 1565
 spraying to reduce, **XV**, 524
 growing—
 origins of, **XV**, 1532
 in tropics and sub-tropics, **XII**, 575
 juvenile and bearing stages, **XIV**, (1567)
 kernel development measurement, **XV**, (526)
 layering, **XI**, 742
 leaf analysis, **XIV**, 113
 mites (*Eriophyes caryae* and *Paratetranychus viridis*), **XIII**, 1288
 nut—
 casebearer (*Acrobasis caryae*), **XIV**, (1662); **XV**, (1071), (1658)s
 composition, **XV**, 523, 525
 harvesting and curing, **XV**, 525
 nutrition, **XV**, 523
 photosynthesis, spraying and, **XV**, 595
 ringing, **XIV**, 114
 rosette, zinc sulphate for, **XV**, 534, 930
 specific gravity: nut quality relation, **XIV**, 1566
 topworking, **XIII**, 788
 transplanting, use of growth substances at, **XIII**, 1231; **XV**, 931
- Pectates**, citrus, **XI**, 631
- Pectin**—
 extraction—
 from apple pomace, **XIII**, 1076
 polyphosphates in, **XIV**, (1431)
 importance in manufacture of jams and jellies, **XIII**, (656)
 tamarind seed, **XV**, (2059)v
- Peeling** fruits and vegetables by explosion, **XIV**, 1981
- Peganum harmala** and its product, **XV**, 1737
- Pelargonium radula** source of geranium oil, **XI**, 1393
- Pemphigus bursarius**, **XIII**, 1411
- Penicillin**—
 crown gall treatment by, **XV**, 551, 552, 1569
Erwinia carnegiana susceptible to, **XV**, 126
 green pea juice as medium for production, **XV**, (1185)
 the product, **XIV**, 434, 1294
 production, growth substances increase, **XV**, 425
- Penicillium**—
 on citrus, control by—
 clipping, **XIV**, 1383
 diphenyl vapour, **XIII**, 1046
 ray treatment, **XV**, 930
 description of genus, **XIV**, 1434
 development on vegetable cut surfaces, **XIII**, 19
digitatum in citrus, **XI**, 265, 273; **XV**, 874, 875, 1893
 disease of soybean, **XV**, 751
 emanations affect storage life of lemons, **XI**, 1456
- Penicillium** (continued)—
 expansion on apples, **XII**, 663; **XV**, 95
italicum in citrus, **XI**, 265; **XV**, 1893
 in orange, methods for detecting, **XII**, 1527
 Peninsula Horticultural Society Transactions 1944, **XV**, 1359
Pennisetum purpureum for compost making, **XIII**, 580
 Pennsylvania agric. Exp. Stat. A.R. 1939/40-1943/44, **XI**, (1054); **XII**, 719; **XIII**, 345; **XIV**, 963; **XV**, 385
 Pennycress, *see* *Thlaspi arvense*
 Pepper (*Capsicum* spp.), *see also* *Capsicum* and *Paprika*—
 bacterial spot (*Phytophthora vesicatorum*), **XV**, (758)
 bell, growth affected by insecticides in soil, **XIII**, 440
 fruit rot (*Colletotrichum capsici*), **XV**, 648
 hulls, preservation of red mango, **XV**, 1332
 mosaic, **XIII**, (1032)
 parthenocarpic compared with normal fruits, **XIII**, 167
 photoperiod affects flower primordia development, **XIII**, 166
 pod spot, **XV**, 1723
 production in Germany, **XIV**, 210
 pungency, chemical test, **XIII**, 165
 red, *see* *Paprika*
 sweet—
 ascorbic acid content, **XIII**, 491
 as ornamental, **XIII**, 492
 virus diseases, **XII**, (982); **XIII**, (1032); **XV**, (596)
 weevil (*Anthonomus eugeni*), **XIV**, 1225
- Pepper** (*Piper nigrum*)—
 cultivation in Netherlands East Indies, **XII**, (659)
 origin and distribution, **XI**, 1351
sclerotium rolfsii on, **XIV**, 1711
 from Sierra Leone, **XV**, 1949
 weevil, lesser (*Lophobaris piperis*), **XI**, (248)
- Peppermint** (*Mentha piperita*)—
 cultivation, **XI**, 495; **XIV**, 694; **XV**, 162, 387, 1721, 1722
 oil—
 production in Bulgaria, **XII**, 1398
 yield: free menthol relations, **XV**, (758)
 trace elements affect, **XII**, (982)
- Peradeniya**, Royal Botanic Gardens, **XIII**, (576)
- Periconia** blight of *Hevea*, **XV**, 1966
- Perilla** spp., light treatment to induce flowering, **XIV**, 990-992, 1001
- Perillo-gum** (*Manilkara* sp.), **XII**, 1016
- Periodicals**—
 new—
 Agricultural Engineering Record, Vol. 1, No. 1, **XV**, 2067
 Plants and Gardens, Vol. 1, No. 1, **XV**, 1340
 Queensland Journal of Agricultural Science, Vol. 1, No. 1, **XIV**, 1447
 from U.S.S.R., received in London, **XIII**, (351)
- Perisierola naphantidis**, **XII**, (653)
- Periwinkle**—
 (*Vinca pervinca*) a cure for fever, **XIV**, 714
 (*Vinca rosea*)—
 aster yellows control in, **XII**, 541
 bacteria-free crown galls on, **XV**, (1659)a
 false blossom virus, **XII**, 849
- Peronea comariana**, **XIV**, 1610

SUBJECT INDEX

- Peronoplasmodium cubensis*, XII, 503; XIV, 1753;
XV, 1158
- Peronospora*—
 brassicae, XIV, 757
 destructor, XI, 470; XIII, 915
 parasitica, XV, (758)
 pisi, XV, 1846
 tabacina, see Tobacco, downy mildew
 viticola, see Vine downy mildew
- Peroxidase—
 in citrus fruits, XII, 1138
 regeneration of heat-inactivated, XIV, 1973
- Perry pear varieties, XV, 980
- Persea gratissima*, see Avocado
- Persimmon—
 Diospyros kaki, see Kaki
 Diospyros virginiana, vitamin C in leaves and fruit, XIII, 639
- Peru, plant resources of, XII, 593
- Pests, see also Insects and particular pest or host—
 in Australia, see under A.R. C.S.I.R., etc.
 of beans, XV, 1834
 control—
 biological, XI, 452, 871, 1195; XIII, 660;
 XIV, (161), 629, 630, (635), 1639; XV,
 369
 calendar, vegetable, XIV, 658
 current contributions on, XIII, 438
 in Idaho, XV, 1596
 in Illinois orchards, XIV, 1611
 in Kansas, fruit, XII, (462)
 in Kentucky, fruit, XII, (462)
 in New York State, XII, 866
 and diseases—
 approved proprietary control products,
 XIV, 1167
 in Brazil, XV, 1567
 manual of, German, XIII, 794
 in Pernambuco, plant, XV, 1922
 of dried fruit, XII, 1538; XIII, 430, 1057;
 XIV, 383, 930, 932
 of economic plants in Africa, XIV, (1370)
 of food plants in tropics, XIII, 271
 of fruit in India, XI, (248); XV, 1038
 fumigation and heat sterilization, XV, 587
 geographical distribution, XI, 549
 insect—
 in Ceylon legislation, XV, (1995)b
 of New York, fruit, in 1943, XIV, (1184)
 of Tucuman, XIV, (1184); XV, (128)
 of medicinal plants, XIV, (290)
 in the Murray Irrigation Areas, XIV, 552
 of mushrooms, XIII, 230
 of ornamentals, XI, 762; XIV, 413; XV,
 1854
 peach, XI, 761; XIV, 587
 recent research on horticultural, XIV, 548
 resistance—
 breeding for, XIII, 795, 797, 798
 of plants, nature of, XII, 107
 rodent, of Morocco, XIII, 437
 of root crops, XIII, 862
 of small fruits, XIII, 116; XIV, (1184)
 of soft (top) fruits in Washington, XIV, 587
 of storage, see Storage
 of stored tobacco, see Tobacco, stored
 of tobacco, see Tobacco
 transmission by seed, XV, 610
 of tropical fruits, XII, 1072
 of vegetable and fruit growing, introduction
 to, XII, (462)
 of vegetable seed production, XIV, 169
- Pests (continued)—
 of vegetables, see Vegetables
 in Victoria, Aust., XIII, 791
 of vine, Conference at Wädenswil, XIV, 549
- Petrobia lapidum* on onion, XIV, 1610
- Petunia axillaris* seed germination stimulated by
 colchicine, XII, 1457
- pH—
 effect on nutrient absorption in spinach, XII,
 1386
 of irrigated orchard soils, XII, 84
 the meaning of the term, XV, (34)
 in nutrient solutions, control of, XII, (39)
 in plant tissue, determination, XI, 670
 preferences of plants, XII, 32
 in sand cultures, XIII, 207
 of water cultures, XIII, 204, 205
- Phalaenoides glycine*, XI, (779); XV, (128)
- Phalsa (*Grewia asiatica*), XI, 239
- Phaseolus aureus*, XV, 1705
- Phasic development in plant systematics, XV, 392
- Phenacoccus*—
 aceris, XIII, 111; XV, 973
 colemani, XV, (1658)j
- Phenological—
 observations on apples, sweet cherries, pears
 and plums, XI, 395
 Report of the Royal Meteorological Society,
 Lond., 1940, 1941, 1943, 1944, XI, (650);
 XII, (1584); XIV, (1476); XV, (946)
- Phenomenal berry—
 description and selection, XI, 58
 training, XI, 79
- Phenoxy compounds, see Growth substances
- Phenylacetic acid, see Growth substances
- Phialophora mustea* on apple juice, XIV, 1108
- Phloem—
 transport, mechanism of, XI, 675
 wall structure of, XIV, (1030)
- Phloeotribus scarabaeoides*, XV, 1608
- Phlyctaenia rubigalis*, control by tartar emetic,
 XIII, 1347
- Phoma*—
 citricarpa on sweet orange, XI, (872)
 disease of flax, XV, 1711
 lingam, XI, 1245
 spp. noted in England 1941, XII, 1302
- Phomopsis*—
 citri, see Citrus melanose, also Orange stem
 and rot
 cinerascens, XIII, 820
 resistance in egg plants, XII, 514
- Phorodon humuli*, XII, 1319, 1397; XIV, 1610
- Phosphate(s)—
 availability of soil, XV, 408
 content as indicator of soil fertility, XII, (659)
 in fruit and fruit products, XIII, 1588
 soil solution affected by, XIII, 1632
- Phosphatic nutrition of fruit trees, XIII, 1184
- Phosphatides in oil seeds, XIII, (1454)
- Phosphorus—
 apple and peach in sand culture affected by,
 XII, 399
 availability in nutrient solutions, XV, (432)
 deficiency—
 in apples, XI, 720
 in citrus, XII, 999; XIII, 249
 in fruit trees, XIII, 1251
 in pears, XIII, 1252; XV, 375
 in spinach (?), XIV, 1746
 in strawberry, XIV, 554
 in vines, XII, 1225

SUBJECT INDEX

- Phosphorus (*continued*)—
 estimation in plants, **XI**, 20; **XII**, 1189; **XIII**, (375); **XIV**, 1008, 1009
 inactivation by aluminium, **XIV**, 444
 and lemon growth, **XIV**, 841
 liming on acid soils affects, **XIII**, 1007
 in pot experiments, **XI**, 372
 radioactive, use in translocation studies, **XI**, 478; **XIII**, 355
 in sewage, nature and value of, **XIII**, 1136
 tomato absorption of, **XI**, 478
 in vegetable juice, **XIII**, 323
 in vegetable soils, **XI**, (488)
- Phosphorylation in *Chlorella*, photosynthesis and, **XIV**, 986
- Photo-electric—
 absorptiometer compared with other analytical apparatus, **XIII**, 370
 spectrophotometric method of analysis, **XII**, (752)
- Photinia lindleyana* as apple rootstock, **XI**, 1033
- Photographic transect for evaluating erosion control value of plant cover, **XIII**, 1114
- Photography—
 of drawings, a cheap method, **XIII**, 374
 in the field, apparatus, **XIII**, 25
 Kodachrome transparencies, **XV**, (432)
 Speed Graphic synchronized flash camera, **XIV**, (1476)
- Photometers, ecological, **XIII**, (375)
- Photoperiod—
 after effects, **XII**, (752); **XIV**, 992
 and *Ambrosia trifida* sex expression, **XII**, (752)
 Californian annuals, response to, **XV**, (432)
 and *Capsicum annuum* flower primordia development, **XIII**, 166
 and chrysanthemum, **XI**, 1292
 and cucumber, **XV**, 712
 and development, vegetative and reproductive, **XI**, 358
 and drought resistance, **XIV**, 1120
 and kok saghyz, **XIV**, 227
 and leaf growth, **XII**, (367)
 and mints, **XI**, 1236
 and onions, **XIV**, 737
 and *Papaver somniferum* growth, **XIII**, 169
 and potato flowering, **XI**, (1229)
 reaction to, adaptation value of, **XV**, (1406)
 response to, age of plant influences, **XIV**, 991
 and rice, **XIII**, (1032)
- Photoperiodism—
 in chlorotic plants, **XIV**, 993
 composition of plant possibly affected by, **XIII**, 15
 in desert annual, **XIV**, 994
 in legumes, **XIV**, 1784
 in long day plants, the nature of, **XI**, 357
 note on, **XII**, 352
 or photoperiodicity? **XV**, 1391
 physiology of, **XV**, 962
 short day—
 plants, date of bud formation, **XII**, 538
 plants, nature of, **XI**, 357
 plants, treatment to induce flowering in, **XIV**, 990
 treatment of chrysanthemums, **XI**, 1292; **XIV**, 1808
 in soybean, *see* Soybean
 in spinach, **XIII**, (947); **XV**, 696
 in *Streptocarpus*, **XIII**, 536
- Photoperiodism (*continued*)—
 studied at Dnepropetrovsk, **XV**, 28
 study of results in plants, **XV**, 394
- Photosynthesis—
 in apple trees, soil moisture affects, **XI**, 1111; **XIII**, 55; **XIV**, 62
 CO_2 —
 absorption during, **XIV**, 989
 depresses, **XII**, 740
 evolution during, **XII**, (752)
 in carnation, **XIII**, 232
 chemistry of, **XII**, (1195)
 dehydration affects, **XV**, (34)
 in *Ferula asafoetida*, **XIV**, 1888
 and growth, **XV**, 1386-1388
 heteroauxin affects, **XIV**, 999
 at high altitudes, **XII**, 1178
 increased by spraying with micro-elements, **XII**, 1180
 leaf condition affects, **XV**, 1389
 leaf hopper injury in apple affects, **XIII**, 112
 measurements, **XI**, (1073); **XII**, 1179
 mechanism in water plants, **XIV**, (1030)
 molecular equivalence of carbohydrates to CO_2 in, **XIII**, (697)
 and phosphorylation, **XIV**, 986
 quantum efficiency and yield, **XI**, 1022; **XII**, 355, 1149
 rate affected by age of leaf, **XIV**, 988
 related to root absorption, **XIII**, 479
 research at Laboratory of Carnegie Foundation, Washington, **XIII**, 1126
 and respiration, equilibrium between, **XIV**, 1470
 review of work in 1942, **XIII**, 1629
 ringing in pecan affects, **XIV**, 114
 soil moisture and, **XI**, 1111; **XIII**, 55; **XIV**, 62
 spray effects on, **XII**, 133, 134; **XIV**, 1649; **XV**, 1634
 in sugar beet, **XIII**, 479
 in sugar cane, **XII**, 1034
 in sunflowers, **XIV**, (1476)
 use of radioactive CO_2 in, **XI**, 1022; **XII**, 1149
 and virus movement, **XII**, 1304
 vitamin K and, **XV**, 396
- Phragmites communis* as possible source of cellulose, **XIII**, 885
- Phyllanthus emblica* vitamin C content, **XIV**, 1398
- Phyllobius* spp. leaf weevils, **XI**, 765
- Phyllocoptes*—
 destructor, **XIV**, 792
 gracilis, **XV**, (1658)
 lycopersici, **XV**, 740
 oleivorus, **XI**, 529; **XV**, 1214
 vitis control, **XIV**, 549, (1184)
- Phyllocoptura oleivorus*, **XIV**, 850
- Phyllostacta vitellinae* larvae, secretion of salicylaldehyde by, **XIV**, (1662)
- Phyllophaga* spp., **XI**, 81, 1186; **XII**, 872
- Phyllosticta*—
 antirrhini, **XII**, 270
 derridis, **XI**, 548
 grandimaculans, *see also* Strawberry leaf blotch, **XII**, 118, 1314
 solitaria, **XV**, 99
 sulata, **XV**, 1911
- Phylloxera*, *see* Vine
- Physalis peruviana*, *see* Cape gooseberry
- Physalospora*—
 corticis, **XIII**, 428
 obtusa, **XIII**, 667

SUBJECT INDEX

- Physic nut (*Jatropha curcas*), **XI**, 572
- Physiologists, directory of members of American Society of Plant, **XIII**, (1638)
- Physiology—
 plant—
 altitude affects, **XV**, 1392
 manual on, **XI**, 642
 in the U.S.S.R., **XIV**, 436
 of trees in relation to their food supply, **XIII**, 677
- Phylostegia*, physiological disease, **XI**, 505
- Phytelephas* spp., **XII**, 1016
- Phytolacca acinosa* an insecticidal plant, **XIV**, 1657
- Phytomonas*—
 carotae, **XIV**, 1731
 lachrymans, **XIII**, 520
 michiganense, **XIII**, 526; **XIV**, 1775
 passiflorae, **XV**, 1572, 2075
 rubi of bramble, **XI**, 577
 savastanoi, **XIV**, 577
 sepedonica, see Potato ring rot
 solanacearum, see also Tomato bacterial wilt, **XV**, 210
 syringae papulans, **XV**, 553
 tumefaciens, see Crown gall
 vesicatorium, **XV**, (758)
- Phytomyza*—
 catnalis, a carrot fly, **XV**, 944
 ilicicola, **XIII**, (956)
 solani, **XIII**, 1444
- Phytopathological Classic* No. 7, **XII**, 1394
- Phytopathological Society, American, abstracts of papers of 32nd annu. meet., **XI**, (650)
- Phytopathology—
 1867-1942, **XV**, (1658)w
 in Brazil, **XII**, (110)
 German, in nineteenth century, **XV**, (1658)y
 manual, Italian, **XIII**, 793
- Phytophthora*—
 cactorum—
 on apples, **XII**, 1227; **XIII**, 104; **XV**, 96
 inactivation by chemicals, **XII**, 459
 on loquat, **XIII**, 105
 capsici, **XIV**, (697); **XV**, 375, 733, 734, 1791
 cinnamomi causes dieback in avocado, **XI**, 881, 884; **XIII**, 266, 551; **XV**, 1219
 citrophthora, see also Citrus brown rot, **XII**, 1003; **XIII**, 255, 551, 552, 974; **XIV**, 585, 847
 cryptogea, **XI**, 1265; **XV**, 768
 eggplant rot, **XI**, (131)
 fragariae, see Strawberry red core
 guayule root rot, **XV**, (597)
 hop disease, **XIII**, 896
 infestans—
 on potato, see Potato blight
 on tomato, see Tomato blight
 megasperma of carrot, **XV**, 1754
 palmivora, **XI**, 1168, 1429; **XIV**, 846, 1916; **XV**, 1208, 1294
 parasitica—
 on cinchona, **XV**, 846
 on citrus, see also Citrus brown rot, **XII**, 1003; **XIII**, 254, 257, 551, 552, 973; **XIV**, 847, 848
 on eucalyptus, **XV**, 1743
 var. *nicotianae*, **XIII**, 890
 on papaw, **XIII**, 265
 on tomato, see Tomato stem rot
 richardiae, **XV**, 769
 spp.—
 on citrus, see also particular species, **XIII**, 253
- Phytophthora* spp. (continued)—
 in onions and shallots, associated with shanking in, **XIV**, 1738
 on rubber, **XV**, 1968
 in tomato, **XI**, (1266)
- Phytoptus vitis*, **XII**, 1319
- Picea orientalis*, rooting of branches of, **XV**, (245)
- Picking dates of deciduous fruits, see also individual fruits, **XV**, 72, 1486, (1493)d
- Pickles, home manufacture, **XIII**, (1087), (1620)
- Pickling, crops for, in England, **XII**, 140
- Picric acid effect on tomato and bean, **XV**, 206
- Pieris rapae*, see also Cabbage caterpillar, **XII**, (468), 1147; **XIII**, 514; **XIV**, 182, (665), 954, 1452; **XV**, 1152
- Pig feed, by-products as, **XII**, 1557, 1559
- Pigeon pea (*Cajanus* sp.)—
 disease, **XIII**, 866
 spacing trials, **XV**, 618
- Pigment development in kidney bean, light and, **XV**, 745
- Pigments—
 carotinoid, sexual reproduction and, **XII**, 14
 drought and plant, **XII**, 1186
 mentors affect plant, **XI**, 1104
 miscellaneous plant, **XI**, 1489; **XII**, (311)
 plastid, **XII**, 15
 red and blue plant, **XII**, (1195)
- Pili nut (*Canarium ovatum*) composition, **XI**, 1418
- Pimento, see also *Capsicum annuum* and *C. frutescens*—
 cultivation—
 in Brazil, **XIV**, (290)
 in Georgia, **XI**, 461; **XII**, 223
 fruit growth, **XI**, 1237
 mildew (*Phytophthora capsici*), **XIV**, (697)
 seed treatment, **XIV**, 1712
- Pine, roots of young lodgepole, **XIII**, (697)
- Pineapple—
 canning, **XI**, 304, 305, 1006; **XII**, 333, 715; **XIV**, 898
 chlorosis, **XV**, 311, 386
 covers for, **XI**, 244
 cultivation—
 in Costa Rica, **XI**, (1441)
 in Fernando Po, **XV**, 271
 in Guatemala, **XV**, 1988
 in Malaya, **XV**, 309
 methods in Florida, **XI**, 959
 in Queensland, **XI**, 1439; **XV**, 861, 1295
 in United Provinces, **XIII**, 618
 drying and dehydration, **XII**, 715; **XV**, 901
 experiments in Mauritius, **XII**, 654
 fire ant (*Solenopsis* spp.) in fields, **XIII**, (298)
 flowering, growth substances affect, **XII**, 1183; **XIII**, 1551
 fruiting, effect of growth substances on, **XIII**, 1552
 grading for canning, **XIV**, 898
 iron affects growth and chemical composition of, **XIV**, 899, (1370)
 juice, **XII**, 715, 1147
 leaf striping by *Pseudococcus brevipes*, **XV**, (1298)
 in Malaya, report on canning industry, **XII**, 715
 manganese—
 : iron reactions in soil and solution of, **XV**, (431), 1919
 toxicity, **XIV**, 423; **XV**, 386, 1919

SUBJECT INDEX

Pineapple (*continued*)—

- manuring, XI, 1042; XII, 331, 1091, 1163; XIII, 619, 620; XIV, (1370), 1454, 1929, 2028; XV, 310, 311, (431), 1296
 - mealybugs (*Pseudococcus brevipes* and *P. pseudobrevipes*), XI, 246, (608); XII, (1518); XV, (1298), 1989
 - from Nigeria, XV, 303
 - nitrate reserve in plant necessary, XII, 1517; XIII, 620
 - nutritive value, XIV, 1393
 - oxalates in, XI, 245
 - pests, XI, (608)
 - preservation by SO₂, XIV, 1429
 - root knot nematode (*Heterodera marioni*), XIV, 360
 - scale, *Diaspis bromelliae*, XIV, 1930
 - soil disinfection, XIV, 360, 361; XV, 1296
 - spacing, XI, 1438; XIII, 619; XIV, 1454, 1929
 - vegetative propagation, XI, 1045
 - water blister disease, XI, 1440
 - in water cultures, XV, 311
 - waxing to preserve, XI, 1461
 - yellow spot virus, XIII, 1029
 - zinc deficiency, XIII, 295, 1632
- Pintsch gas, effect on carnation, XII, 986
- Pinus virginiana*, mycorrhiza of, XI, 378
- Piper* beetle—
- bacterial leaf spot, XV, 1288, 1289
 - cultivation, XV, 294
 - Rhizoctonia solani* root rot, XV, 1950
 - tip-burn, XV, 295
- Piper nigrum*—see Pepper (*Piper nigrum*)
- Piri-piri, biological control by *Antholcus varinervis*, XIV, 954
- Pirus*, see *Pyrus*
- Pistache—
- dichogamy and pollination, XII, 95
 - ecology of, XIII, 1234
 - leaf, carbohydrate content, XIII, 1233
 - pollen longevity, XIV, (115)
 - propagation, vegetative, XI, 536, 903
 - virus disease, XIV, 1126
- Pithecolobium*, pests of, XI, (965)
- Plankton, possible wartime use, XIII, 1105
- Plant(s)—
- of Africa, diseases and pests of economic, XIV, 1370
 - analysis—
 - correlation, XIV, (1476)
 - of extracts for chlorophylls *a* and *b* by photoelectric and spectrophotometric method, XII, (752); XIII, 1128
 - manual on, XIV, 2008
 - spectroscopic, XI, 1080, (1092); XII, 1184; XIV, 445, 1443; XV, 7, 8, 1354
 - of tissues, XIII, 698, (1182); XIV, 1671; XV, 403, 404, (431), 1383, (1406)b, 1553
 - boxes, isolation, XI, 361
 - cation absorption mechanism, XII, (752)
 - cells, water relations in, XI, (380)
 - of Central Europe, XII, 1368
 - classification, a modern, XIII, (1138)
 - culture chamber, a refrigerated, XIII, 30
 - growth—
 - conditions essential for, XI, 174
 - regulators, work of Bureau of Plant Industry, XIV, 1462
 - hormones, see Growth substances
 - improvement, basic principles, XIV, (1476)
 - and insects, inter-relations, XIV, 430

Plant(s) (*continued*)—

- introductions into Australia, XIII, 2
 - material preservation, XIII, 28, 29
 - nutrition—
 - the biological dynamic method of, XI, 684
 - ion availability in, XI, 689
 - surface relation of roots and colloidal clay, XII, (752)
 - Physiologists, directory of members of American Society, XIII, (1638)
 - and plant science in Latin America, XV, 2069
 - poisoning by, XI, 377
 - protection, see also Pathology—
 - card index for, XIV, 117
 - Institute at Alnarp, XIII, 418; XV, 1539
 - manual, XV, (599)
 - methods, biological, see Biological control
 - in Rio Negro, Argentina, XV, 1541, 1542
 - Service, necessity for, in India, XV, 1237
 - in Sweden, XIV, 550, 551; XV, 1539
 - Research Station, Mt. Albert, Auckland, work at, XI, 1147
 - residue utilization, XIV, 1522
 - resources of the U.S.S.R., XV, (34)
 - respiration, see Respiration
 - sap, organic acid determination in, XII, 777
 - tissue—
 - areas, evaluating, XIV, 1007
 - blackening after death, XI, 1501
 - cultures, XI, 18; XII, 738; XIV, 414
 - fluids, a press to recover, XI, 666
 - pH determination, XI, 670
 - relative position of cell walls in developing, XII, (18)
 - staining, XI, 19
 - testing, see Plant analysis
 - tumour bacteria, XIV, 128
 - tumours, effect of chemicals on, XII, (765)
 - and vitamins, a review, XIII, 1624
- Plantago ovata* cultivation, XV, 297
- Plantains—
- in Buganda, XIV, 1927
 - industry in Burma, XII, 267
- Plantation crops of India, manual, XV, 1337
- Planting—
- depth for apples, XIV, 459
 - fruit trees—
 - in Brazil, XV, (505)
 - English problems, XV, 1407
 - manual of pruning and, XIV, 2011
 - an orchard in S. Africa, XV, 976
 - out technique for fruit trees in Punjab, XIV, 1367
- Plants and Gardens*, Vol. 1, No. 1, XV, 1340
- Plasmiodiophora brassicae*, see Clubroot
- Plasmolysis in vegetable seeds, XIII, 857
- Plasmopara viticola*, see Vine downy mildew
- La Plata, climate of, XIV, (1476)
- Plenodomus humuli*, XV, 160
- Pleospora mali*, XV, 1575
- Plesiocoris rugicollis*, XI, 1175, 1183
- Plofilm, see Storage wraps
- Plodia interpunctella* pest of dried fruit and medicinal plants, XII, 1538; XIII, 430; XV, 1853
- Plots, experimental, automatic watering, XI, (380)
- Plum—
- aphid, mealy (*Hyalopterus pruni*), XIII, 826
 - bacterial canker (*Pseudomonas mors-prunorum*), XIII, 102, 1268; XV, 1571
 - bacterial spot (*Xanthomonas pruni*), XV, 1570

SUBJECT INDEX

Plum (continued)—

the beach (*Prunus maritima*), XIII, 41; XV, 50, 982

Beaty, a non-infectious disease of, XIV, 553
biochemical studies, XI, (737)

breeding—

for frost resistance, XIV, 485
in Iowa, XV, 1352

brown rot (*Sclerotinia fructicola*), XV, 1580

budding and grafting, growth substances aid in, XIII, 46

cherry, see *Prunus cerasifera*

curculio (*Conotrachelus nenuphar*), XI, (1187); XIII, 433; XV, 1606

Cylindrocylindrium shoot wilt in layers, XIII, 1279; XV, 100

drying, XIII, 1050; XIV, (1431)

flower morphology, XI, 718

frameworking, XV, 991

frost—

damage, XII, 1285

resistance, XII, 372; XIII, 1153, 1154; XV, 941

greengage × peach hybrid, XIV, 489

growing—

in Argentina, XIV, (1083)

in Michigan, XV, 1425

in Scania, Sweden, XIII, 713

gumming and boron applications, XI, 1470; XIII, 1257; XV, 1020

hardness, soil conditions and, XII, 97

hardy, see frost resistance

harvesting, XIV, 1082

identification, XII, 785; XIV, 1486

internal browning, XII, 58

Japanese, *Prunus salicina*, XV, 986

juice concentrates, XI, 628, 993

Kelsey spot, XII, 58

leaf area and fruit composition, XIV, 1510

leaf hopper (*Euprioryx stellulata*), XI, 1175

marketing, XIV, 1372

mume, sterility in, XIII, 52

myrobalan, see *Prunus cerasifera*

origin of cultivated, XV, 975

packing, XI, 620; XIV, 1372, 1374

parthenocarp, XII, 712

pests, XIII, 431; XIV, 587

phenological observations on, at Geisenheim, XI, 395

pollination, XI, 45, 391, 1105; XIII, 52; XV, 505; XV, 40, 43

pre-storage treatment—

with acetylene, XI, 258, 260

with ethylene, XI, 260

propagation, XIV, 961

respiration in stored, XI, 263, (291)

ripening by means of ethylene, XIII, 307; XV, 869

rootstocks—

in Australia, XV, 1348

in France, XV, 995

frost resistant, XII, 429

German work, XIV, 496

growth substance treatment, XV, 1431, 1439

in India, XV, 936

layering, XII, (383), 1225

myrobalan, see *Prunus cerasifera*

in Palestine, XII, 1157

for peaches, XI, 44; XIV, 1060

seedling, XIV, 1055

shoot wilt, XI, 1162

Plum (continued)—

rust (*Puccinia pruni-spinosae*), XIV, 563, 1142

sawfly (*Hoplocampa flava*), XI, 772

storage—

in Argentina, XIV, 909, 1381

in Australia, XI, 259; XII, 667, 1146, 1147

in California, XIV, 1944

in S. Africa, XI, 263, (291)

SO₂ cold process, XII, 1107; XIII, 1044

Taphrina pruni disease, XIV, 1140

thinning, XV, 65

tortrix (*Argyroproctus pruniana*), XIII, 832

in transit, dry ice as supplement to refrigeration of, XIV, (1955)

varieties—

in Argentina, XV, 365

Beaty, non-infectious disease in, XIV, 553

English, XV, 41, 984, 985

Green Gage, XV, 1427

in Indiana, XV, 1426

Swedish, XIV, 471-473, 1045; XV, 913

Verticillium wilt (*V. albo-atrum*), XIV, 1608

Plutella maculipennis, XIII, 1350; XIV, (635), 954, 2025; XV, 372, 1699, 1775

Podosphaera leucotricha, XII, 445; XIII, (429)

Poisoning by plants, XI, 377

Polarity—

in cuttings, XIV, 1472

in plants, review on, XIII, 687

Polarograph compared with other analytical instruments, XIII, 370

Polarographic determination of ascorbic acid, XII, (295)

Polemonium coeruleum as medicinal plant, XV, 655

Polia oleacea on greenhouse tomatoes, XIV, 266

Pollen—

affects fruit growth, XIII, 388; XIV, 1503

appraising air-borne, XI, 663

collection, preservation, distribution, etc., XIII, 741; XIV, 503, 960

germination—

affected by nutrition, XIII, 14

avocado, medium for, XIII, 1498

test media, XIV, 504

magnesium in, XV, 1382

plum, XIV, 505

of potato and relatives, XI, (821)

production in grape vines, grafting to ensure timely, XV, 1523

as source of bacterial infection, XIV, 1598

storage—

grape, XIII, 1222

pistache, XIV, (115)

tube growth—

in cherry, XI, 389

growth substances and other chemicals affect, XIII, 675; XV, (34)

in relation to pollen size, XIV, 960

temperature, auxins, colchicine and vitamin B affect, XII, 346

viability, vine, XII, 1275

Pollination—

of almond, XV, 1534

apple, see Apple

in apricot, XII, 389; XV, 476

biology of, in fruit trees, XIV, 1066

in blueberry, XIV, 95; XV, 517

of cacao, see Cacao

of cherimoya, XII, 574; XIV, 1920

cherry, see Cherry

in crop plants, cross, XIV, 730

cucumber, XIII, 198

SUBJECT INDEX

Pollination (continued)—

- of deciduous fruits, **XI**, 1105; **XII**, 389; **XIII**, 665; **XV**, 944
- grafting to ensure, **XIII**, 385, 387; **XV**, 1523
- hand, **XII**, 801
- in honeysuckle, **XIV**, 1305
- in lobelia, **XIV**, 1306
- mechanism in many plants, **XIII**, 684
- of olive, insect vectors, **XII**, (803)
- of peaches, **XIII**, 742; **XV**, 452
- pear, *see* Pear
- plum, *see* Plum
- prune (Italian), **XII**, 1235; **XV**, 1448
- in *Prunus* affected by heat, **XIV**, 1065
- self, how to avoid, **XV**, 1670
- in sesame, natural and controlled, **XV**, (227)
- in Swiss orchards, **XV**, 944
- of tung, *see* Tung
- use of bees in, **XIII**, 51; **XV**, (74), 997
- of vegetables, how effected, **XV**, 1669
- vine, *see* Vine pollen and pollination
- Zwetschen, **XI**, 391

Polychrosis botrana, *see* Vine moths

Polydrosus cervinus weevil, **XI**, 765

Polyembryony—

- in avocado, **XIV**, 1871
- in coffee, **XV**, 835
- in plants, a review, **XI**, 653

Polyethylene glycols as carriers of growth substances, **XIV**, 1464

Polygonum—

- bucharicum*, seed stimulation, **XV**, 1850
- dumetorum* as medicinal plant, **XII**, 1368
- nepalense*, a tea weed, **XIV**, 1891
- sachalinense*, a tannin plant, **XV**, 171

Polyiploids, osmotic values, **XIV**, 441

Polyploidy—

- in apples, *see* Apple varieties, tetraploid induced—
- by colchicine, *for detail see* Colchicine, **XI**, (681), (1067), (1137), (1370); **XII**, 233, (273), 757, 758, 794, (1412), 1414; **XIII**, 32, (33), 201, 1102; **XIV**, 960, (1298); **XV**, (526)
- by paradichlorbenzene, **XIV**, 243
- by sanguinarine hydrochloride, **XIII**, 241
- by various methods, **XV**, 952
- a review of literature on, **XIII**, (690)
- vitamin C and, **XII**, 1452
- winter hardness in apples and pears influenced by, **XIII**, 389
- work at John Innes Institution, **XI**, 1032; **XII**, 712; **XIV**, 960

Polyspora lini, **XII**, (982)

Polystictus—

- versicolor* found in connexion with papery bark canker, **XIII**, 1273
- wood rot, **XII**, 374

Pome fruits—

- biennial bearing control, **XI**, 401
- frost resistance in, **XII**, 426; **XIII**, 809, 1239, 1240
- morphology, **XI**, 48
- rootstocks, **XIV**, 53, 496; **XV**, 1446

Pomegranate (*Punica granatum*)—

- cultivation in Algeria, **XIII**, 991
- juice, **XIII**, 1607
- possible virus disease, **XV**, 94

Pomology—

- on English apples, **XV**, 921
- a Swedish, **XIV**, 471; **XV**, 913
- a Swiss, **XV**, 1494

Poncirus trifoliata as citrus rootstock, **XV**, 777

Ponds, farm, **XI**, 15

Ponkan citrus variety, **XIV**, 1315

Pontianac or jelutong, **XI**, 314

Popillia japonica, *see* Japanese Beetle

Poppy—

- boron deficiency, **XIV**, 217, 218; **XV**, 1734
- growing—
- for oil, **XI**, 492; **XII**, 525, 526, 946, 1401; **XV**, (1852)d
- the opium, in Spain, **XV**, 1736
- heart rot in oil, **XV**, 1734
- leaf disease due to *Helminthosporium papaveris*, **XII**, 1410; **XIV**, 219
- morphine from, **XII**, 946; **XIV**, 709
- opium, polyploidy induced in, **XII**, (1412)
- photoperiod affects growth of white, **XIII**, 169
- seed treatment, **XIII**, 1375

Populus suaveolens, dormancy breaking in, **XIII**, 356

Portugal, plants introduced and indigenous in, **XII**, 1208

Pot—

- cultures—
- double compartment, **XV**, 2, 3
- to investigate soil deficiencies, **XIV**, 1110
- experiments, phosphorus in, **XI**, 372
- plants—
- advantage of plunging in medium of peat or sand, **XV**, 762
- composts for, **XI**, (654); **XV**, 16, 18
- hints on, **XV**, 1088
- study of soil in, **XIII**, 853, 1134
- wall, permeability of flower, **XIV**, 8

Potamogeton—

- in Manchuria, the genus, **XI**, (1092)
- photosynthesis affected by water withdrawal from assimilating tissue in, **XV**, (34)

Potash—

- agricultural salt a substitute for ? **XII**, 914
- boron and magnesium interaction on melon, **XII**, 470
- and citrus crops, **XI**, 1313; **XIII**, 1182
- determination in fertilizers, **XI**, 1120
- flax fibres benefited by, **XII**, 936
- from rubbish fires, **XIII**, 62
- from seaweed, **XIII**, 393
- smoke house ash and coconut husk ash supply, **XII**, 257, 263
- and tomato mosaic, **XIII**, 1431
- tracheal content in fruit trees affected by, **XI**, 723

Potassium—

- acid phosphate as aid to rooting in cuttings, **XI**, 658
- boron relationships in plant nutrition, **XIV**, 447
- for cane fruits, leaf analysis and, **XV**, 509
- colorimetric tests, **XIV**, 954
- crop growth and yield affected by, **XIII**, 1182; **XV**, 407
- deficiency—
- in apples, **XI**, 720, 721; **XII**, 1250; **XIV**, 954; **XV**, 86
- in citrus, **XII**, 999; **XV**, 1203
- in peach trees showing trunk injuries, **XV**, 1549
- in strawberry, **XIV**, 554
- in tea, **XI**, 195, 921
- in tung, **XIII**, 1493
- in vines, **XIII**, 1225; **XV**, 88

SUBJECT INDEX

Potassium (*continued*)—

- determination, **XI**, 671; **XII**, 29, (708); **XIII**, (702); **XIV**, (19), 1008, 1009, (1030), (1476); **XV**, (432)
- as fertilizer, symposium on use of, **XIII**, 1182
- in fruit and fruit products, **XIII**, 1587, 1589, 1590
- and growth substances, combined effect, **XII**, 145
- interrelationship with other elements, practical application of, **XIII**, (1182)
- iodide—
 - for celworm control, **XIII**, 1342
 - vitamin C in tomato affected by, **XII**, 1431
- in leaves of apple and peach, soil management affects, **XII**, 82
- metabisulphite for botrytis control in grapes, **XI**, 977
- orange growth affected by, **XI**, 861
- potato manuring, **XII**, 475
- proteolytic activity in pea leaves stimulated by, **XIV**, 1290
- salts, absorption by plant storage tissues, **XI**, (31)
- in soil—
 - colloid complex, **XIII**, (1182)
 - cultivation affects, **XI**, 1117
 - movement of, **XI**, (171)
 - hardiness affected by, **XII**, 430
- tobacco quality affected by, **XIII**, 1182
- in vine leaf petioles, **XIII**, 1223

Potato—

- on acid land, needs of, **XIV**, (673)
- Actinomyces* in, *see* scab
- altitude affects degeneracy, **XIII**, 871
- aphids, **XII**, 157; **XIII**, (877)
- apical leaf speck, **XIII**, 152
- in Australia, a survey, **XII**, 149
- auxin, water uptake and osmotic pressure in, **XIV**, (1803)
- bacterial—
 - ring rot, *see* ring rot
 - soft rot (*Erwinia carotovora*), **XI**, (1229)
- biology, **XI**, 456
- black scurf and stem canker (*Corticium solani*), **XIV**, 192
- blackening on cooking, *see* cooking quality
- blight and late blight (*Phytophthora infestans*), **XI**, (131), 799, (821); **XII**, 931-933, (982), 1301, 1387; **XIII**, 472, 1356; **XV**, 1708
- bordeaux mixture injurious to, **XIV**, 672
- breakdown, role of *Myzodes persicae* in spread, **XIV**, 191
- breeding, **XIII**, 1096; **XIV**, (193)
- canned, vitamin C in, **XV**, 1331
- canning, **XV**, (1336)
- for canning—
 - effect of soil and variety, **XIV**, 2018
 - preprocessing of, **XV**, (1336)
- chips, storage affecting, **XII**, 283
- classification of Italian, **XII**, 473
- Colorado beetle, *see* Colorado beetle
- cooking quality, **XI**, 1005, 1500; **XII**, 1377, 1379; **XIII**, 466, 644; **XV**, 1706
- cracking, prevention of, **XI**, (1229)
- crinkle, **XI**, (1229)
- cropping twice yearly, **XV**, 144
- cultivation methods, **XI**, 458; **XII**, 1369; **XIII**, 867, 868
- day length affects, **XI**, 1221; **XII**, 919
- deficiency symptoms, **XIII**, 151, 152
- degeneracy affected by altitude, **XIII**, 871

Potato (*continued*)—

- dehydration and drying, **XII**, (1390); **XIII**, (1603); **XIV**, 933, (945), 1405; **XV**, 879, 906, (911)
- discs, metabolism, **XI**, (380), (1092)
- diseases—
 - in Ohio, **XII**, 154
 - prevention by early harvesting, **XV**, (227)
 - in S. Rhodesia, **XII**, 155
- dormancy—
 - breaking, **XI**, 1028, 1217; **XII**, 1374, 1579; **XIII**, 149, 468, 469, 1630, 1632; **XIV**, 456; **XV**, (758), 1113
 - manipulation, **XII**, 1373; **XIII**, 870, 1353
 - prolongation, **XII**, 286, 1534; **XIV**, 1533
- drying, *see* dehydration
- dusting, **XII**, (1390); **XIII**, (877)
- celworms (*Heterodera* spp.), **XII**, (158), 607, 926, 934, 1389; **XIII**, 158, 876, (1358); **XIV**, 1685
- fertilizers, *see also* manuring—
 - copper, **XIV**, (193)
 - phosphatic, **XIII**, 459
 - potassic, **XIII**, 471
- field plot design, **XII**, (982)
- flea beetle (*Epitrix* sp.), **XII**, 1388; **XIII**, 473
- floral biology of a wild, **XV**, (758)
- flower and berry production influenced by photoperiod, **XII**, (1390)
- flower bud formation, influences on, **XII**, (1390)
- flowering, photoperiodic induction of, **XI**, (1229)
- forcing early, **XII**, 925
- fruit setting, **XIII**, (474)
- grafting—
 - on other plants, **XII**, 760
 - on potato, **XV**, 1114
 - with tomato to control Colorado beetle, **XIII**, 215
- growing—
 - in Argentina, **XI**, 790
 - in Assam, **XI**, 1018
 - in Australia, **XI**, 791; **XII**, 149; **XIII**, 148
 - in Brazil, **XI**, 793
 - in Burma, and marketing, **XI**, 913
 - in England, **XI**, 792; **XII**, 917
 - in Fiji, **XI**, 1360
 - in Florida, **XI**, 1225
 - German technique, **XI**, 455
 - intensive, **XII**, 1369; **XIII**, 467, 867, 868
 - in Jamaica, **XI**, 1361
 - in Java, **XI**, (248)
 - in low latitudes, **XIV**, 870
 - in Mauritius, **XI**, 550
 - in Orissa, **XII**, 1579
 - soil cultivation for, **XI**, 458
 - in S. Rhodesia, **XIII**, (159)
 - in Victoria, Aust., **XIII**, 148
- growth—
 - conditions affecting, **XI**, 101
 - shown pictorially, **XII**, 918
- growth substances—
 - encourage root growth in, **XII**, 342
 - inhibit growth in, **XII**, 1534; **XIV**, 1533
 - less in virus affected, **XII**, 1384
- haulm—
 - composition, **XII**, (929)
 - as source of cellulose, **XII**, 1136
- hollow heart, **XII**, (1390)

SUBJECT INDEX

Potato (*continued*)—

- insect fauna and virus spread in Sweden, XIII, (1358)
- irrigation, XI, 795; XIII, (877); XIV, (1803)
- leaf—
 - area estimates, XIV, (193)
 - blotches on Arran Pilot, XIII, 147
 - curl diagnosis, XIII, 1357
 - extract as indicator of soil fertility, XII, 751
 - hopper (*Empoasca fabae*), XII, (468)
 - roll, XII, (158), (480); XIII, (877); XIV, 1205
- "leak", storage disease due to *Pythium ultimum*, XI, 1228
- mahogany rot in store, XII, 1110
- manuring, XI, 97, 98, 1219, 1224-1226, 1361; XII, 150-152, 475, 476, 927, 928, (929), 1375-1379; XIII, 459, 471, 872, 873, (877); XV, 1814
- mashing decreases vitamin C in, XIII, 642
- minor element nutrition, XI, 1226; XII, 151, (929)
- moth (*Phthorimaea operculella*), effect of acetylene treatment on, XIII, 469
- nitrogen of the, XIV, 190
- nutrition, *see also* manuring, XIII, (1358); XIV, (755)
- nutritive value, XI, 457
- peelings, use as seed, XIII, 867
- pests—
 - American articles on, XII, (982)
 - in Colorado, XII, 1388
 - DDT for, XV, (1185)
 - in Iowa, XI, 800
 - soil, XIII, 875
- photoperiodism in the, XIV, 870
- plant, boron content, XI, 1223
- pollen, XI, (821)
- products, XI, 315
- propagation, *see also* "seed"—"fancy" methods, XV, 1110
- purple dwarf virus, XI, 460
- quick growing, for late planting, XII, 924
- response to northern and southern temperatures and photoperiods, XII, 919
- Rhizoctonia* treatment, XII, 479
- ring rot (*Phytophthora septentrionalis*), XII, (158), (480), 930, 1385, (1390); XIII, 155, 156
- root eelworm, *see* eelworm
- sawdust for use in cultivation, XIV, 1772
- scab (*Actinomyces scabies*), XI, (1229); XII, 156, (158), 1386
- scorching to break dormancy, XIV, 456
- "seed"—
 - Canadian seed potato eye trade, XIV, 668
 - cutting or treatment, XIII, 150, 867, 868
 - dormancy, *see* dormancy
 - eyes, being readily transported, XIV, 188, 668; XV, 142, 619, 1108, 1109
 - incubation, XV, 143
 - life of, XII, 1371
 - management, XI, 794, (821); XII, 153, 154, 920-922; XIII, 867, 868; XIV, 189
 - optimum age for planting, XII, 1372
 - peelings used as, XIII, 867
 - production, influence of climate on, XIV, 1204; XV, 141
 - selection, XI, 1216
 - size, XIV, (673)
 - storage, XIII, 631
 - summer planting, XV, 1112

Potato "seed" (*continued*)—

- tops used as, XII, 923, 1369; XIII, 1354; XV, 619, 620, 1108, 1109, 1111
- treatment—
 - with ethylene chlorhydrin, XV, (758)
 - with illuminating gas, XIII, 869
- skin spot disease (*Oospora pustulans*), XIII, 1355
- soft rot—
 - (*Phytophthora septentrionalis*), *see* ring rot
 - caused by *Bacterium subtilis*, XIV, 669
- S. American, selection and breeding in England, XIII, 146
- Soviet work on, XII, 1369; XIII, 867, 868
- spacing, XII, 474; XIV, (673)
- species, new wild, from Peru, XIV, (673)
- spindle tuber, XI, 797
- spindling sprout, XI, 796
- spraying, XII, 933, (1390); XIII, (877)
- sprouting checked, *see* dormancy prolongation
- sprouting—
 - factors affecting, XII, 1373; XIII, 870
 - merits of, XI, 1220
- starch content influenced by manuring, XII, 1378
- stem end rot, XIII, 157
- stems for propagation, *see* "seed", tops
- storage, XI, (101), 982, 1228, 1462; XII, 283-286, 1110, (1112), 1533; XIII, 1096, 1567-1569; XIV, 375, 912, (918)
- Sweet, *see* Sweet potato
- tuber—
 - auxanometer for recording growth, XIII, (159)
 - composition affected by—
 - pre-storage conditions, XIII, 1567
 - storage conditions, XIII, 1568, 1569
 - dormancy, *see* Potato dormancy
 - moth (*Gnorimoschema operculella*), XII, (1390)
 - pathogens, XI, (1229)
 - a spotting of, XI, 100
 - water absorption affected by auxin in, XIII, (676)
- varieties—
 - for dehydration and drying, XIV, 1666, (1803)
 - for East Africa, XIV, (1298)
 - German, XII, 1370
 - for Great Britain, XI, 454
- variety resistant to scab and blight, XV, 621
- vernization, XI, 1218
- virus-free—
 - mass production in S. Africa, XV, 1107
 - in S.W. England, XII, 1381
- virus-infected, growth substances in tubers of, XII, 1384; XV, (1853)
- viruses—
 - effects of, XII, 1382
 - in England, XII, 1381; XIII, 153, (874)
 - identification, XI, 798; XII, 1383
 - in India, XIV, (673)
 - "K", XII, (1390); XIII, (877)
 - leaf curl or roll, XII, (158); XIII, 1357; XIV, (673), 1205
 - in Maine, XII, (1390)
 - mosaic, XII, 1382; XIII, 154
 - peach and apricot hosts of vector, XII, 477
 - purple dwarf, XI, 460
 - resistance to, XII, 1301

SUBJECT INDEX

- Potato viruses (*continued*)—
 review on, **XIII**, (877)
 seed transmission, **XIV**, (673)
 spread in field, **XIV**, 670
 in U.S.A., **XI**, (1229)
 vectors, **XII**, 477, 478, (982); **XIV**, 670
 in Victoria, Aust., **XII**, 1380
X, **XI**, 459, 1227; **XIII**, (1358); **XIV**,
 (193), (673); **XV**, (758)
Y, **XIV**, (673); **XV**, (758)
 yellow dwarf, **XI**, (1229)
 yield affected by, **XIV**, (193)
 vitamins in dehydrated, **XIV**, 1405
 vitamin B₁ in, **XIII**, 643
 vitamin C in, **XI**, 99; **XIII**, 470, 641, 642;
XV, (758), 1331, 2016
 wart disease, resistance to, **XII**, 1301
 wild (*Solanum commersonii*), **XI**, 1222
 wilt diseases, **XII**, (480)
 wireworm control, **XIV**, 671
 work in Maine, **XII**, 1155, 1156
Xylaria tuber rot, **XII**, (158)
- Poterium spinosum*, germination inhibitors in, **XIII**,
 689
- Poultry in citrus groves, **XV**, (1232)
Praecitrullus, ancestor of water melon, **XV**, 200
 Predators of insect pests, catalogue of, **XIV**,
 (1185)
- Prepodes* spp. pests of citrus, **XI**, 1327
- Preservation, *see also* Storage—
 breeding fruit and vegetables with view to,
XV, 2002
 Campden fruit preserving tablets, **XII**, 1106
 of foodstuffs, **XIV**, 904
 of plant material, **XIII**, 28, 29
 quick freezing methods, *see* Storage, frozen
 pack
 by SO₂, *see* Sulphur dioxide
- Pressure gauge for fruit, **XIV**, 523, (534)
- Prices of fruit, changes in N. York State, **XII**,
 (829)
- Prickly pear (*Opuntia* spp.)—
 biological control, **XI**, 184, 774; **XII**, 130
 spineless, **XV**, 1899
 spread, **XII**, 1330, 1331
- Primula*—
 the genus, **XV**, 1855
malacoides strain, a new, **XV**, 944, 2079
obconica—
 pollen tube growth in, **XII**, 1455
 seed production, **XIII**, (1462)
- Prince Edward Island, apple growing, **XIII**,
 712
- Privet (*Ligustrum japonicum*) berries as poultry
 food, **XIII**, 538
- Proceedings—
 American Phytopathological Society 33rd
 annu. meet., **XII**, (1164)
 Association of former Students of the
 Mauritius College of Agriculture, **XII**, 717
 Association of Official Agricultural Chemists
 56th annu. Convent., **XI**, 1511
 Botanical Society of America, abstracts,
XV, 431
 Conference on Middle East Agricultural
 Development, **XV**, 938
 New York State Horticultural Society 1943
 and 1944, **XIII**, 1097; **XV**, 1356
 Northern Nut Growers Association 30th
 annu. Meet., **XI**, 1040
 West African Agricultural Officers, Nigeria,
 3rd Conference, 1938, **XI**, 329
- Processing, *see also* particular processes—
 of fruit—
 in Ceylon, **XIV**, 395
 English, **XIII**, 1050; **XIV**, 969
 in Nigeria, **XV**, 303
 in Victoria, Aust., **XIII**, 1055
 of fruit and vegetables—
 domestic, **XIII**, 1070, 1071; **XIV**, 969
 in the Punjab, **XIV**, 1956; **XV**, 380
 manual, proposal for, **XV**, 1311
 nutritive value affected by, **XV**, 2015
 nutritive value and home, **XIV**, 1974
 vitamin content affected by, **XII**, 293
- Prodentia litura* on cabbage, **XV**, 1775
- Prodiocetes haematicus*, **XI**, 1396
- Production in British Empire, **XI**, 374
- Products, Empire, research on, **XI**, 985
- Promecotheca papuana*, **XI**, 234
- Propagation, *see also* particular processes and
crops—
 aerial, of vine, **XI**, 1139
 beds, temperature of, **XII**, (351)
 composts, *see* Composts
 by cuttings—
 review of work on, **XIV**, 967
 L. B. Stewart's work on, **XIV**, 452
 of deciduous fruits, **XI**, (737); **XIII**, 1160-
 1163; **XIV**, 967
 double intermediary method, **XII**, 1209
 East Malling methods, by cuttings and layers,
XIV, 967
 frameworking, *see* Frameworking
 fruit, in Algeria, **XIV**, 1494
 of fruits in India, **XI**, 584
 by layers, review of work on, **XIV**, 967
 of nursery seed stocks, **XIII**, 728
 by root cuttings, **XII**, 377; **XIV**, 494; **XV**,
 1440
 by seed of trees and shrubs, **XV**, 49
 sphagnum moss peat for, **XII**, 533
 transplanting a substitute for, **XIV**, 493
 vegetative, methods, **XI**, 1081, 1099; **XII**,
 (3); **XIII**, 1160-1163; **XV**, 48
 of woody plants, a manual, **XV**, 465
- Prophylaxis, disease, **XII**, 459
- Proprietary products for control of pests and
 diseases, list of approved, **XIV**, 1167
- Prostrate plants made, temporarily, to grow
 upright by covering, **XI**, 678
- Protaspis citri*, **XIV**, 1840
- Protein—
 -ascorbic acid complex in carrots, **XIV**, 1967
 cellular dissociation, **XIII**, (690)
 foods, green vegetables as, **XI**, 1502
 leaf—
 direct use as food, **XII**, 676
 manufacture, **XII**, 1550
 spinach, **XIV**, (759)
 synthesis, relation of carbohydrate content
 to, **XIII**, 691
Torula utilis source of, **XIV**, 1294
 of tree seeds, **XIII**, (697)
- Protoanemonin derived from buttercup, **XIV**, 712
- Protaprae* spp.—
 on tobacco, control of, **XIV**, 690
 on tomato, **XIV**, 1782
- Protoplasm—
 structure of, **XV**, 965
 in vegetable cells, **XV**, (227)
- Protoplasmic streaming, literature on, **XIII**, 685
- Provitamin A, *see* Carotin
- Prunaceae* curly leaf disease, **XIV**, 555

SUBJECT INDEX

Prune—

- boron toxicity symptoms, XI, 728
- brown rot (*Sclerotinia fructicola*), XII, 440
- dehydration, XIII, 1598; XIV, 1976
- diamond canker of French, XII, 120
- diseases, XIV, 574
- dwarf—
 - and mosaic, XII, (113); XIII, 97
 - strains of, XV, (599)
- grading, XIII, 401
- grafting, XI, 39
- harvest date forecasting, XV, 480
- irrigation, XII, 404
- Italian, pollination, XII, 1235; XV, 1448
- juice making, XI, 1469
- pests, XIV, 587
- rootstocks, XIV, 500
- soil moisture and size of fruit, XII, 1254
- storage, XIV, (379)
- sugar, blossom bud formation, XI, 731
- surplus disposal, XI, (1506)
- thrips, XI, 429
- varieties in N.S. Wales from U.S.A., XIII, 724
- viruses, XII, (113), 120; XIII, 97; XV, (599)
- worm, destructive (*Mineola sciulella*), XV, 1629

Pruning—

- almond, XV, 1533
- apple, *see* Apple
- avocado, XI, 880; XII, (587)
- blueberry, *see* Blueberry
- citrus, *see* Citrus
- coffee, *see* Coffee
- deciduous fruit, XI, (405), 1123; XII, 69, 823; XIII, 398, 757, (758), 759-761, 1188, 1189; XIV, 80, 1079, 1524, 1525, (1545), 2011; XV, 65, 66, (74), (505), 1343
- figs, XIV, 1528
- Lorette system, XV, 1001
- nut trees, XIV, 546
- the Oeschberg method, XIV, 80, 1525; XV, (74), 1454
- olive, *see* Olive
- oranges, *see* Orange and Orange root
- peach, *see* Peach
- pear, XI, 730; XIII, (67)
- quince, XI, 1124
- stone fruits, XIII, 1188
- tea, *see* Tea
- vines, *see* Vine
- young fruit trees, XV, (505)

Prunus—

- campanulata*, paternal habit in, XIV, 1309
- cerasifera*—
 - hybrids, *Sclerotinia fructicola* isolates from, XIV, (547)
 - in Kazakhstan, XIV, 481
 - mottle and asteroid spot, XV, 554
 - types of, XIV, 480
 - value for breeding, XII, 372
- cerasus*, imperfect stage of *Sclerotinia laxa* on, XIV, (635)
- Coryneum beijerinckii* on, XII, 859
- in Eastern Canada, XI, 36
- insititia* and its hybrids, XIV, 488
- laurocerasus*, an oil plant, XV, 1363
- line pattern virus in, XII, 435
- mahaleb*, *see also* Cherry rootstocks
- mahaleb* types known in Italy, XII, 800
- maritima*, XIII, 41; XV, 50, 982
- pollination affected by heat, XIV, 1065
- rootstocks for stone fruit, XII, 799
- salicina*, XV, 986

Prunus (continued)—

- sargentii* as cherry rootstock, XII, 1221
- serrulata* for testing cherry viruses, XV, 1025
- subcordata* a hardy plum, XV, 941
- triflora*, a hardy plum, XIII, 1153
- vein clearing disease, XI, 1158
- virginiana*, X disease on, XII, 111, 112
- Psalliotia campestris*, secondary spores in, XII, (982)
- Psallus ancorifer*, XV, 1764
- Pseudobalsamia microspora* disease of mushroom beds, XI, 816
- Pseudococcus*—
 - brevipes*, XI, 246; XV, (1298)
- comstocki*—
 - on apple, XIII, 1292; XIV, 1160
 - on citrus, XI, 157, 158; XV, 942
 - feeding habits, XV, (1658)
 - parasites of, XV, (128), 942, 1041
 - on peach, XIII, 1292
- kenyae*, XII, 1511; XIII, 1014
- longispinus*, XI, 161; XIV, 1873
- pseudobrevipes*, XI, (608)
- spp.—
 - on pineapple, XI, 246, (608); XII, (1518); XV, 1989
 - on vine, XIV, 593, 628
- Pseudomonas*—
 - campestris*, XIV, 233
 - citri*, XII, 1004; XIV, 1838
 - juglandis*, XI, 1162; XIV, 1598
 - medicaginis phaseolicola*, *see* Bean halo blight
 - mors-prunorum*, XII, 1307; XIII, 102, 1268; XIV, 1597; XV, 557, 1571
 - prunicola*, XI, 1163
 - solanacearum*, XI, 555; XIII, 588
 - tumefaciens*, *see* Crown gall
- Pseudoperonospora humuli*, *see* Hop downy mildew
- Pseudopeziza*—
 - ribis*, XV, 1577
 - tracheiphila*, *see* Vine rougeot
- Psidium*—
 - guayava*, *see* Guava
 - littorale*, XV, 1229
- Psila rosae*, XII, 951, (982); XIII, 183, 920; XIV, 548, 726, 727, (729); XV, 1755, 1756
- Psychology, plant, XV, 1371
- Psyllia*—
 - mali*, XII, 1319; XIII, 1290
 - pyricola*, XII, 123, 1319; XIV, (635)
- Psyllid control on tomato and potato, XV, 216
- Psylliodes attenuata*, XII, 1319, 1397
- Pteridium aquilinum*, *see* Bracken
- Pterocladia* spp. as source of agar, XIV, 1670
- Ptinus tectus* pest of dried fruit, XII, 1538
- Ptochomyza asparagi*, XIV, (1298)
- Publications of Canadian Department of Agriculture, XV, 927
- Puccinia*—
 - antirrhini*, *see* Antirrhinum rust
 - asparagi*, XIII, 186; XIV, 748
 - pruni-spinosae*, XIV, 563, 1142
 - taraxaci*, XV, 675
- Pucnanthemum incanum*, an oil plant, XV, 1363
- Pueraria*—
 - bios distribution in leaf of, XIV, (1030)
 - thunbergiana*, XII, 1501; XV, 1918
- Puerto Rico—
 - Agric. Exp. Stat. Rio Piedras, A.R. 1939/40, 1941/42, 1942/43 and 1940/41, XI, 1520; XIV, 423; XV, 386, (2082)e
 - Est. exp. agric. Rio Piedras, Informe bien. 1938/9, XII, 330

SUBJECT INDEX

- Pullularia pullulans*, XV, 1306
Pulses, production in Fiji, XI, 607
Pumpkin—
 Boer, XV, 1794
 composition, XV, 1785
 dehydration, XV, 1328
 discussion on, XIII, 519
 growing in Queensland, XIV, 769
 as oil plant, the Tschermak, XIV, 214
Punjab—
 Fruit Journal, special preservation number, XIV, 1956
 fruits, XI, 220
 Provincial Co-operative Fruit Development Board, XI, (248)
Pyracantha, scab on (*Fusicladium pirinum* var. *pyracanthae*), XIV, (1816)
Pyramid form of tree training, XII, 1259; XIV, (92); XV, 1451, 1463
Pyrethrins—
 analysis of, XV, (1658)u
 ovicidal properties, XIV, 623
 role in pest control, XV, (128)
Pyrethrum—
 active constituents, XII, 1339
 clonal strains, XIV, 1660
 dosage mortality curve, XIV, 156
 drying, XV, 125
 dust, latent injury from, XV, (1071)
 evaluation, XI, 437, 1201; XIV, (161)
 flowers from Nigeria, XV, 1925
 growing—
 in Belgian Congo, XV, 1928, 1929
 in Dalmatia, XIII, 1327
 in India, XI, 181, 547
 in Java, XI, 1358
 in Kashmir, XV, 1927
 in Kenya, XIII, 1506; XIV, 633, (1184); XV, 1926
 in Peru and Ecuador, XIV, 1182
 in U.S.S.R., XV, 124
 for S. Rhodesia, XIV, 155
 harvesting in Rhodesia, XII, 132
 preparations, XIV, (161)
 repellent to codling moth, XV, 1049
 smoke for fumigation, XII, 892
 trials in Queensland, XV, 387
 in Washington State, XV, 1054
Pyridine and pyridoxine, *see* Growth substances
Pyroderces rileyi, XIV, 1847
Pyrrole derivatives not a substitute for iron in synthesis of chlorophyll, XIV, 560
Pyrus—
 amygdaliformis, XI, 383
 baccata as apple rootstock, XII, 384
 betulifolia, fireblight on, XIV, 1596
 salicifolia, characters of, XIII, 1172
 spp., polymorphism in, XII, (791)
Pythiaceae fungi on citrus, XIII, 253
Pythium—
 on beans, XV, 749
 spp.—
 on citrus, XIII, 253
 culture and inoculation methods, XV, (599)
 on horticultural plants, XIII, 824
 on pea, XI, 1273; XV, 1182
 ultimum—
 in stored potatoes, XI, 1228
 in tomatoes, XIII, 935; XV, 1696
 in vegetable marrow, XIV, 1267
Quadraspidiotus perniciosus, *see also* *Aspidiotus*, XIV, 594
Quality—
 determination in horticultural produce, XII, (1536)
 in fruit affected by picking time and handling, XV, 72
 in fruits and vegetables, relation of specific gravity to, XIV, 1958
Quarantine, plant—
 legislation discussed, XII, 11, 549
 regulations for S. Rhodesia, XIII, 983
 regulations for Sweden, XIII, (706)
Quarterly Report of Malayan pineapple canning industry 1941, XII, 333, 715
Quartz sand media, XIII, (20)
Quebec apple varieties, XI, 701
Queensland Acclimatisation Society—
 A.R. 1940/41-1943/44, XI, 1521; XII, 1580; XIV, 964; XV, 387
 changes its address, XII, 1580
Queensland—
 Dir. Plant Industry, A.R. 1940 and 1941, XI, 1042; XII, 331
 horticultural handbook of, XV, 1339
 horticulture in, XIV, 1876, 1877
 Journal of Agricultural Science, Vol. 1, No. 1, XIV, 1447
 nut, *see* *Macadamia*
 vegetable growing in North, XIV, 1931
Quince—
 growing in England, manual, XIV, 949
 Japanese (*Cydonia lagenaria*), jelly from, XII, 790
 oriental fruit moth on, control of, XV, 1623
 pruning, XI, 1124
 rooting media for, XII, 1231
 as rootstock for pear, XIII, 739
 rootstocks for, XII, 1232
 tree hopper (*Glossonotus crataegi*) control, XV, (1658)z
Quinine, *see also* *Cinchona*—
 after the war, proposals for agreement on, XIV, 1353
 increasing production, XIII, 1018
 Remigia pedunculata a source of, XV, 1290
Quinoa (*Chenopodium quinoa*) a grain crop, XII, 1500
Rabbit—
 control by virus (*Myxomatosis cuniculi*), XV, 109
 traps, XIV, 612
Radiant energy, relation to etiolation, XII, 1177
Radiation—
 on espalier walls, XIV, 464
 respiration affected by, XIV, 1469
 solar, XI, (248)
Radioactive elements—
 affect yield in kok saghyz, XIII, 502
 assimilation by plants, XII, 742
Radish—
 black, manuring, XIV, 733
 boron deficiency symptoms, XII, 472; XIV, 731; XV, 1143
 cross pollination, XIV, 730
 growing, XIV, (734)
 growth substances, effect on seed, XII, 342, 347; XIII, 673
 nutrition, XIV, 731
 pollination, honey bees for, XV, 1757

SUBJECT INDEX

- Radish (*continued*)—
 root respiration in discs of, XV, 685
 seed production, XIV, 732; XV, 1757, 1758
- Rafinesque, C. S., travels of, XV, 27
- Ragweed (*Ambrosia* spp.), pollen production inhibited by chemical sprays, XV, 1701
- Ragwort (*Senecio jacobaea*), XV, 114
- Rain—
 gauge, an intensity, XV, 1397
 nitrogen content of Ceylon, XII, (273); XIV, (365)
- Rainfall and fruitgrowing, XV, 481
- Raisins—see Vine
- Rambutan (*Nephelium mutabile*) growing in Philip-pines, XI, 1419
- Ramie—
 in Brazil, compared with other fibres, XIV, 1694
 cultivation tests, XIV, 681
 fibre production, XI, 901, 1233; XIII, 1508
- Ramularia sp. on guayule, XIV, 1244
- Rape—
 diseases and pests, XIV, 1226
 growing for oil, see Oil plants, rape
 pest *Meligethes aeneus*, XIV, 708; XV, 652
 seed, mouldy, evaluation of, XIV, 1227
 seed oil, XI, 493; XII, 524
- Raphia sudanica in Northern Nigeria, XIII, 585
- Rapport pour les exercices 1940 et 1941 de l'Institut nationale pour l'étude agronomique du Congo Belge (I.N.E.A.C.), XIV, 2017
- Rare earths, occurrence in plants and soils, XIII, 1133
- Raspberry—
Agrilus communis a pest of, XI, 1185
 beetles (*Byturus tomentosus* and others), XII, 871; XV, 572, 1607
 black—
 fertilizers for, XIV, 94
 potash needs, XV, 509
 topping, XIV, (1567)
 boron deficiency possible, XII, 407
 breeding in U.S.A., XII, (411); XIV, (1567); XV, 507
 in B. Columbia, XII, 407
 cane—
 blight (*Leptosphaeria coniothyrium*), XIV, 586
 midge (*Thomasiniana theobaldi*), XIV, 586; XV, 107
 nursery maintenance, XV, 1496
 conference at East Malling, June 1943, XIII, 772
 decline, XII, 407; XIII, 814
 deficiency symptoms, XV, 508
 diseases, XIII, 772; XIV, 1591
 frozen pack, XI, (291); XII, 673
 green manuring, XIII, 404
 growing—
 in Massachusetts, XII, (833); XV, (1535)d
 in Missouri, XIV, 1085
 in New Zealand, XV, 1498
 in Ontario, black and red, XV, 1008
 identification of red and purple, XIV, 93
 juice, apple-, XI, 991
 leaf curl virus, XIII, 813, 1264
 leaf spot (*Septoria*), XIV, (635)
 manuring, XIII, 404; XIV, 100; XV, 508
 micro-element nutrition, XV, 508
 mosaic, XI, 1161; XIII, 154, 791
 mulching, XI, 1131
 nurseries, English, XV, 506
- Raspberry (*continued*)—
 pest, *Phyllocoptes gracilis*, XV, (1658)g
 seedlings, five new, from East Malling, XIII, 1208
 soils, XII, 407
 spur blight (*Didymella applanata*), XI, 759
 stem canker (*Coniothyrium wernsdorffiae*), XIV, 136
Stereum purpureum on, XV, 102
 the trailing, *Rubus parvifolius*, XI, 59
 varieties—
 at East Malling, XII, 1271
 English, XV, 983
 Norfolk Giant, XIV, 1546; XV, 983
 Sunrise, XIV, (1567)
 Swiss, XV, 1499
 for syrup, XV, 980
 viruses, XI, 1161; XII, 407; XIII, 154, 791, 813, 814, 1264
 winter injury, XIII, 422
- Rat extermination, XII, (880); XIV, 1164, 1637
- Raw materials in U.S.S.R., plant, XIV, 975
- Ray—
 treatment for *Penicillium* on stored citrus, XV, 930
 ultra-violet—
 for detecting orange blemishes, XII, 1527
 germination and growth affected by, XI, (681)
- X—
 cell affected by, XII, (367)
 for control of crown gall, XV, 970
 seed treatment effects, XII, (982)
 for study of field bean, XI, 484
- Recording crops, economy of labour in, XIII, 1204
- Red currant—
 blister rust relations of, XIII, 822
 growing in Ontario, XIV, 1084
 pests, XII, (867); XIII, 431
 tomato ring spot on, XII, (1318)
 vitamin C content, XIV, 1395
- Red mango pepper hulls preservation, XV, 1332
- Red spider (including *Oligonychus ulmi*, *Paratetranychus pilosus*, *Tetranychus telarius*)—
 in Argentina, XIV, 590
 breeding apples for resistance to, XV, 1042
 control, XII, 1358; XIII, 1345; XIV, 1148; XV, 568, 569
 effect of carbolineum and petroleum emulsion on, XV, (599)
 life history, XIV, 1148; XV, 569
 in Maine, XV, 973
 on prune, XIV, 1610
 toxicity—
 of different chemicals to, XIII, 1286
 of selenium-containing plants to, XI, (441)
- Red squill, *Urginea maritima*, vegetative propagation, XIII, 450
- Red, Turkey, Syrian rue a source of, XV, 1737
- Reed, anatomy of the common (*Phragmites communis*), XIII, 885
- Refuse utilization, see also Compost, XIV, (458)
- Regeneration after splitting, in young stems and root tips, XII, 1174
- Regulations, see also Certification, Legislation, Quarantine, etc.—
 on seed production and vines and fruits in Algeria, XV, (1006)
 on vegetable marketing in Sweden, XV, (1852)w
- Rehovot Agricultural Research Station, Palestine, XV, 938

SUBJECT INDEX

Rejuvenation—

- of fruit trees by soil blasting, XIV, 1081
- of trees damaged by root diseases, XIII, 117

Remijia pedunculata a source of quinine, XV, 1290

Renovation of unprofitable orchards, XV, 45

Replanting—

- on same site, data from Murrumbidgee Irrigation Area, XIV, 465
- treatment of old tree sites, XIV, 524

Report—

- of Agricultural Policy Cttee of Trinidad and Tobago, XIV, 424
- on Agriculture in Malaya, XII, 328
- Canadian Cttee on Food Preservation 1941/1943, XIV, (968), 2019
- Canadian Horticultural Council 20th annu. Meet., Feb. 1942, XIV, 952
- Canadian Horticultural Council, Cttee on Horticultural Research 1943, XIV, 953
- Central Cocoa Research Station, Tafo, 1938-1942, XIV, 2021
- Ceylon, Rubber Research Bd, work of, 1940, XII, 324
- Deli Tobacco Exp. Stat. 1939, XI, (650)
- on fruit investigations in Algeria, XIV, 2016
- Hawaii Agric. Exp. Stat. 1940-1942, XIII, 1632
- Kapuskasing exp. Stat. 1936-1940, XIII, 663
- Luxmoore, review on horticultural aspects, XIV, (19)
- on Mauritius agriculture, XIV, 962
- nat. agric. Res. Bur. Chungking 1938, XII, 325
- the Phenological, 1940, 1941, 1943, XI, (650); XII, (1584); XIV, (1476)
- Station fédérale d'essais viticoles et arboricoles à Lausanne 1939 and 1940, 1941 and 1942, XII, 1154; XIV, 1441
- Tanganyika Dep. Agric. specialist and research work 1943, XV, 389
- Wädenswil Horticultural Research Station 1935/37, 1938/39, 1940, 1941 and 1942, 1944, XI, 328; XII, 1162; XIV, 1451; XV, 944, 2079
- on the work of the agricultural stations in the Madras Presidency 1939/40, 1941/42, XI, 1033; XIV, 961
- work of Chamber of Agriculture, Mauritius, 1940/41, XII, 718

Reproduction, sexual—

- and carotinoid pigments, XII, 14
- relation to development of plants, XII, 1185

Reproductive capacity in plants, a manual, XIII, 1088

Research—

- agricultural—
 - economic consequences, XIV, 970
 - in Great Britain, XII, 1571
 - in Venezuela, XIII, 574
 - in West Africa, XIV, 1442
- in agriculture, XII, 725, 727
- in the Americas, XIII, 1003, 1004
- in the British Empire, XII, 726
- coefficient of contingency for horticultural, XIV, (19)
- in Costa Rica, XII, 1497
- in Germany, XII, 364
- in Guatemala, XII, 1482
- horticultural—
 - in Australia, XIII, 1246
 - in Sweden, XIII, 707

Research (continued)—

Institutes—

- in Great Britain, horticultural, XII, 1571
- Inter-American, XIII, 268, 1501
- in Peru, Tingo Maria, XIII, 1003, 1501
- Rothamsted, XIII, 1101
- in South and Central America, XII, 728, 1502

results, dissemination, XI, 8

tetrachoric correlation for horticultural, XIII, (31)

in U.S.S.R., XIV, 1

work of U.S. Dep. Agric., Nov. 15, 1941, XIV, (1455)

Reserve material migration, XIV, (458)

Residues, agricultural, saccharification, XV, 1335

Resin(s)—

from *Agathis alba*, XI, (1506)

in the British Empire, XV, 2056

from *Euphorbia tirucalli*, XIV, 1245

from *Ferula pyramidata*, XIV, 1236, 1725

and gum production in Russia, XIV, 975

Jak tree, XI, 313

from *Xanthorrhoea* spp., XV, 192

Respiration—

in apples, *see* Apple

of banana, *see* Banana storage

energy changes associated with plant, XIII, 679

experiments, apparatus for, XIV, 17

measurement, XI, 349; XII, 739; XIV, (1476); XV, 1390

and photosynthesis, equilibrium between, XIV, 1470

of plasmolysed tissues, XIV, (1476)

radiation and, XIV, 1469

thermodynamic aspect of, XV, 397

Reviews—

Agricultural Research Council. Agricultural research in Great Britain. London, 1942, XII, 1571

Ainsworth, G. C., and Bisby, G. R. A dictionary of the fungi. London, 1943, XIII, 1621

Aiyer, A. K. Y. N. Field crops of India. Bangalore, 1944, XV, 1337

Allwright, W. J. S. The controlled marketing of citrus fruit in South Africa. Pretoria, 1945, XV, 1338

Association for the study of systematics in relation to general biology. Bibliography of key words for the identification of the British fauna and flora. Dorking, England, 1942, XII, 1561

Aubert, T., and Lugeon, A. Arboriculture fruitière moderne. Lausanne, 1944, XIV, 1032

Bagenal, N. B. Fruit growing, modern cultural methods. 2nd edit. London, 1945, XV, 2061

Baker, J. O. Market gardening. London, 1944, XV, 912

Barnes, H. The Queensland agricultural and pastoral handbook, Vol. II, Horticulture. Brisbane, 1940, XV, 1339

Bawden, F. C. Plant viruses and virus diseases. 2nd edit. Waltham, Mass., 1943, XIV, 947

Bennett, E. H. The chemical formulary. Brooklyn, N.Y., 1945, XV, 2062

Brimble, L. J. F. Flowers in Britain. London, 1945, XV, 2063

SUBJECT INDEX

Reviews (continued)—

- British Mycological Society, Plant Pathology Committee. List of common British plant diseases. London, 1944, XV, 364
- Britton-Jones, H. R. The diseases of the coconut palm. London, 1940, XI, 323
- Browne, C. A. A source book of agricultural chemistry. Waltham, Mass., 1944, XIV, 2006
- Bush, R. Soft fruit growing. London, 1942, XIV, 948
- Bush, R. Tree fruit growing, I, Apples. London, 1943, XIV, 949
- Bush, R. Tree fruit growing, II, Pears, quinces and stone fruits. London, 1943, XIV, 949
- Bush, R. Soft fruit growing. 2nd edit. London, 1944, XIV, 2012
- Bush, R. Frost and the fruitgrower. London, 1945, XV, 2064
- Chandler, W. H. Deciduous orchards. London, 1942, XIII, 336
- Chester, K. Starr. The nature and prevention of plant diseases. Philadelphia, Pa, 1942, XV, 362
- Chilean Nitrate Educational Bureau. If they could speak. New York, 1941, XII, 318
- Chilean Nitrate Educational Bureau (Willis, L. G.). Bibliography of references to the literature on the minor elements and their relation to plant and animal nutrition. 3rd edit. and suppl. 1-4. N. York, 1939, 1940, 1941, 1942, 1943, XIV, 950
- Chilean Nitrate Educational Bureau (Willis, L. G.). Bibliography of references to the literature on the minor elements and their relation to plant and animal nutrition. 3rd edit., 5th suppl. N. York, 1944, XV, 924
- Commission Pomologique Romande. Arbres et arbustes à petits fruits. Neuchâtel, Switzerland, 1945, XV, 1494
- Copley, G. H. Wild flowers and weeds. London, 1944, XIV, 1435
- Costa, M. Olives and olive products. Rome, 1940, XIII, 1628
- Christensen, C. M. Common edible mushrooms. Minneapolis, 1943, XIII, 1622
- Crowell, H., and Lavalee, E. Check list of diseases of economic plants in Canada. (Mimeo.) Dep. Agric. Ottawa, 1943, XIII, 1627
- Dahl, C. G. Pomologi. Beskrivningar over de viktigaste i Sverige odlade fruktsorterna, I, Apples; II, Pärön och plommon. 2nd edit. Stockholm, 1943, XV, 913
- Darlington, C. D., and Janaki Ammal, E. K. Chromosome atlas of cultivated plants. London, 1945, XV, 2065
- Dodge, B. O., and Rickett, H. W. Diseases and pests of ornamental plants. Lancaster, Pa, 1943, XIV, 413
- Faes, H., Staehelin, M., and Bovey, P. La défense des plantes cultivées. Lausanne, 1943, XIV, 1107
- Fawcett, G. S., and Stoughton, R. H. The chemical testing of plant nutrient solutions. Salisbury, England, 1944, XIV, 2007
- Felt, E. P. Shelter trees in war and peace. N. York, 1943, XV, 914
- Gardner, V. R. Basic horticulture. N. York, 1942, XII, 1562

Reviews (continued)—

- Garner, R. J. Propagation by cuttings and layers. Recent work and its application with special reference to pome and stone fruits. East Malling, England, 1944, XIV, 967
- Garrett, S. D. Root disease fungi. Waltham, Mass., 1944, XV, 915
- Gilman, J. C. A manual of soil fungi. Ames, Iowa, 1945, XV, 1342
- Gourley, J. H., and Howlett, F. S. Modern fruit production. N. York, 1941, XI, 1507
- Grainger, J. Garden science. London, 1940, XI, 646
- Green, D. E. Diseases of vegetables. London, 1943, XIII, 657
- Grünberg, I. P. Variedades de durazneros y ciruelos que se cultivan en el país [Argentina]. Buenos Aires, 1944, XV, 365
- Grünberg, I. P. El arte de criar e injertar frutales. Buenos Aires, 1944, XV, 1344
- Grünberg, I. P. La poda de los frutales. Buenos Aires, 1941, XV, (1343)
- Hambidge, G. [Editor]. Hunger signs in crops. Washington, D.C., 1941, XI, 1015
- Harris, D. Vegetable seeds. London, 1943, XIII, 1625
- Hayhurst, H., and Britten, H. Insect pests in stored products. London, 1940, XI, 647
- Hedrick, O. P. Fruits for the home garden. N. York, 1944, XV, 916
- Hertzman, N., Nilsson-Leissner, G., Swankman, N., and Aronson, L. Lantbrukets fröodling. Stockholm, 1940, XII, 1563
- Hewer, D. G. Practical herb growing. London, 1941, XII, 316
- Hilyer, C. I. Hydroponics. Food without soil. Harmondsworth, Middlesex, 1940, XI, 322
- Hoagland, D. R. Lectures on the inorganic nutrition of plants. Waltham, Mass., 1944, XIV, 2005
- Imperial Agricultural Bureaux. The production of seed of root crops and vegetables. London, 1943, XIII, 1099
- Institut français du Caoutchouc. Le caoutchouc d'hévéa. Paris, 1945, XV, 2066
- Johansen, D. A. Plant microtechnique. London, 1940, XI, 1014
- Jones, O., and Jones, T. W. Canning practice and control. London, 1941, XI, 1013
- Keen, B., and Armstrong, J. Herb gathering. London, 1941, XII, 709
- Kessler, H., Widmer, A., and Züllig, E. Die Verwertung des Obstes. Frauenfeld, 1945 (?), XV, 2014
- King, F. C. Gardening with compost. London, 1944, XV, 917
- Klotz, L. J., and Fawcett, H. S. Color handbook of citrus diseases. Berkeley and Los Angeles, Calif., 1943, XII, 1143
- Kobel, F., Schmidt, G., and Kessler, H. Der Schweizer Obstbau. Berne, 1940 (?), XI, 648
- Könemann, E. Nussbau in allen Lagen. Berlin, 1943, XV, 1529
- Krüssmann, G. Die Praxis der geholzwermehrung. Berlin, 1943, XV, 465
- Large, E. C. The advance of the fungi. London, 1940, XI, 643

SUBJECT INDEX

Reviews (continued)—

- Laurie, A. Soilless culture simplified. N. York, 1940, XI, 320
- Laurie, A., and Ries, V. H. Floriculture. N. York, 1942, XII, 1564
- Laurie, A., and Kiplinger, D. C. Commercial flower forcing. The fundamentals and their practical application to greenhouse crops. Philadelphia, 1944, XV, 363
- Lawrence, W. J. C., and Newell, J. Seed and potting compounds. 2nd edit. London, 1941, XI, 1508
- Leonard Hill. Food Industries Manual 1941. London, 1941, XII, 315
- Levitt, J. Frost killing and hardiness of plants. A critical review. Minneapolis, 1941, XV, 918
- Lundin, Y. Hemträdgårdens frukter och bär. Stockholm (?), 1943 (?), XIV, 1038
- McLean, R. C., and Cook, W. R. I. Plant science formulae. London, 1941, XII, 312
- Macself, A. J. The fruit garden. London, 1943, XIV, 416
- Malisoff, W. M. (Editor). Dictionary of biochemistry and related subjects. N. York, 1944 (?), XIV, 2009
- Meyer, B. S., and Anderson, D. B. Plant physiology. London, 1940, XI, 642
- Milsum, J. N., and Grist, D. H. Vegetable gardening in Malaya. Kuala Lumpur, 1941, XII, 313
- Moore, H. I. Crops and cropping. London, 1943, XIII, 1626
- Newmark, M. Dictionary of science and technology in English, French, German and Spanish. N. York, 1943, XIV, 1432
- Nicholson, H. H. The principles of field drainage. Cambridge, 1942, XII, 1565
- Nicol, H. Biological control of insects. Harmondsworth, Middlesex, 1943, XIII, 660.
- Nilsson, E. Köksväxtfröodling. Stockholm, 1940, XIII, 340
- Ogden, G. K. Basic for science. London, 1942, XIII, 1623
- Percival, J. Agricultural Botany. 8th edit. London, 1942, XII, 1566
- Phillips, A. H. Gardening without soil. London, 1939 and 1940, XI, 321
- Phillips, A. H. The science of soilless culture. London, 1943, XIV, 415
- Piper, C. S. Soil and plant analysis. Adelaide, 1942, XIV, 2008
- Pirone, P. P. Maintenance of shade and ornamental trees. N. York, 1941, XIII, 337
- Ramsbottom, J. Edible fungi. London, 1943, XIV, 1433
- Rebour, H. Manuel du planteur. Tunis, 1938, XV, 366
- Robbins, W. W., Crafts, A. S., and Raynor, R. N. Weed control. N. York, 1942, XIII, 659
- Robinson, D. H. (Editor). Vegetable and fruit grower's conference. Worcester, 1945, XV, 1346
- Rowe, W. M. Trees and shrubs. Harmondsworth, Middlesex, 1944, XV, 919
- Royal Horticultural Society. The vegetable garden displayed. 4th impression. London, 1942, XII, 1570

Reviews (continued)—

- Rudloff, C. F., and Schanderl, H. Die Befruchtungsbiologie der Obstgewächse und ihre Anwendung in der Praxis. Stuttgart, 1942, XIV, 1066
- Salisbury, E. J. The reproductive capacity of plants. London, 1942. XIII, 1088
- Scharrer, K. Biochemie der Spurenelemente. Berlin, 1941, XII, 710
- Schilleter, J. C., and Richey, H. W. Text-book of general horticulture. N. York, 1940, XI, (319)
- Schmitz-Hübsch, H. Neuzeitlicher Obstbau. 3rd edit. Frankfurt on Oder, 1939, XI, (319)
- Schopfer, W. H. Plants and vitamins. Waltham, Mass., 1943, XIII, 1624
- Seabrook, W. P. Modern fruitgrowing. 6th edit. London, 1944, XV, 920
- Segal, L. (Editor). New complete Russian-English dictionary. London, 1942, XII, 1144
- Seiffert, G. Virus diseases in man, animal and plant [transl. by Taylor, M. L.]. N. York, 1944, XIV, 2010
- Shewell-Cooper, W. E. Continuous cloche gardening. London, 1941, XII, 317
- Simons, A. J. The vegetable grower's handbook, Vol. 1 and Vol. 2. Harmondsworth, Middlesex, 1945, XV, 2068
- Smith, J. An introduction to industrial mycology. London, 1942, XIV, 1434
- Sparrow, K., Jr. Aquatic Phycomycetes, exclusive of the Saprolegniaceae and Pythium. London, 1943, XIV, 2004
- Stephenson, C. C. S. A manual of tropical citrus culture. 2nd edit. Colombo, 1942, XIII, 658
- Stoney, J. Pruning and planting fruit trees. London, 1944, XIV, 2011
- Taylor, H. V. The apples of England. 2nd edit. London, 1945, XV, 921
- Thompson, C. R. Modern apple tree pruning. London, 1941, XI, 1016
- Thompson, C. R. Modern apple tree pruning. 2nd edit. London, 1943 and 1944, XV, 922
- Tothill, J. D. (Editor). Agriculture in Uganda. London, 1940, XI, 318
- Verdoorn, F. Plants and plant science in Latin America. Waltham, Mass., 1945, XV, 2069
- de Vries, J. German-English science dictionary. London, 1939, XI, 317
- de Vries, J. French-English science dictionary. London, 1940, XI, 645
- Wallace, T. The diagnosis of mineral deficiencies in plants. A colour atlas and guide. London, 1943, XIII, 1089
- Wallace, T. The diagnosis of mineral deficiencies in plants. A colour atlas and guide. A supplement. London, 1944, XV, 923
- Webber, H. J., and Batchelor, L. D. The citrus industry. Vol. 1. History, botany and breeding. Berkeley and Los Angeles, Calif., 1943, XIV, 946
- White, P. R. A handbook of plant tissue culture. Lancaster, Pa, 1943, XIV, 414
- Whitehead, G. E. Plain fruit growing for small families. London, 1941, XII, 1567

SUBJECT INDEX

Reviews (continued)—

- Whitehead, G. E. Garden herbs, culture, storage, uses. London, 1942, **XII**, 1568
- Whitehead, G. E. Tomatoes, mushrooms and other choice foodstuffs. London, 1944, **XIV**, 2014
- Whitehead, G. E. Soil sense for green gardeners. London, 1945, **XV**, 2070
- Willis, L. G., *see* Chilean-Nitrate
- Woodbridge, W. R. War gases and foodstuffs. London, 1942, **XII**, 1569
- Rhagoletis*—
- cerasi*, **XII**, (462); **XIV**, 116, (635), 1152; **XV**, 1611
- cingulata*, **XIV**, 599
- pomonella*—
- on apple, *see* Apple maggot
- on blueberry, **XIV**, 140
- spp., biological studies, **XII**, (462)
- Rhamnus purshiana*—
- growing in B. Columbia, **XII**, 522
- in Tucumán, **XII**, 1583
- Rheum emodi* a possible substitute for Chinese rhubarb, **XIV**, 760
- Rhizoctonia*—
- defoliating American holly cuttings, **XIII**, 244
- disease of apple grafts, **XIII**, 816
- in potato, **XII**, 479; **XIII**, 157
- solan*—
- of gladioli, **XV**, 1191
- in horse beans, **XIV**, 548
- on kok saghyz, **XIV**, 1436
- in peas, **XIII**, 858
- of *Piper betle*, **XV**, 1950
- soil fungi affect, **XV**, 612
- in tomato seedlings, **XIII**, 935
- spp. on beans, **XV**, 749, (758)
- Rhizoglyphus hyacinthi*, **XII**, 544
- Rhizopogon* in citrus, **XV**, 255
- Rhizopus*—
- nigricans*—
- in packed peaches, **XIV**, 583
- on sweet potato, **XIV**, 1860
- on vegetable marrow, **XIV**, 1267
- suinus* produces growth substance, **XI**, (1067)
- Rhode Island agric. Exp. Stat. A.R. 1941, 1943, 1944, **XIII**, 667; **XV**, 943, 2077
- Rhodesia—
- home orchards, **XIII**, 377
- imported pests, **XIII**, 983
- trees, shrubs, etc., for, **XIV**, 1874
- Rhododendron—
- culture in Kansas, **XV**, 1861
- propagation by cuttings, **XV**, 52, 232
- species, **XV**, (1865)d, e
- Rhopalosiphum*—
- lactucae* control, **XIII**, 431
- padi*, **XIV**, 1151
- pseudobrassicae*, **XI**, (821)
- Rhubarb—
- growing—
- in England, **XV**, 698
- in Spain, **XV**, 1777
- Indian rhubarb (*Rheum emodi*) a substitute for, **XIV**, 760
- vitamin C in, **XIII**, 190
- Rhus*—
- coriaria* for leather treating extract, **XV**, 191
- species at Kamenec-Podolsk Botanical Garden, **XV**, 191
- toxicodendron*, **XII**, 883; **XIII**, 1306

Rhynchites—

- aequatus*, **XIII**, 1284
- germanicus*, **XI**, 1175; **XII**, 453
- Ribes*, *see also* Black and Red currants
- Ribes*—
- aurum* a source of carotene, **XIII**, 71
- seed germination, aids to, **XI**, 407
- sp. pollination, **XV**, 511
- tetraploid types, **XV**, 512
- Riboflavin—
- content of common foods, **XIII**, 328
- in fresh fruits, **XV**, 2017
- in grape juice, **XIV**, 1561
- in isolated roots of *Datura*, sunflower and tomato, **XII**, 1435
- in vegetables, **XI**, 283
- Rice—
- growing in Sierra Leone, **XV**, 1361
- grass (*Spartina townsendii*) exploitation, **XI**, 1282
- marketing in Burma, **XI**, (965)
- pests, **XII**, 242
- research in the Philippines, **XII**, (273)
- Ricinus communis*, *see* Castor bean
- Ringing—
- apples, *see* Apple
- citrus, **XI**, 517
- deciduous fruit trees, **XIII**, 399; **XIV**, 459
- oranges, **XI**, 1312; **XIV**, 1833
- pecan, **XIV**, 114
- to prevent *Armillaria*, **XI**, 197
- and transpiration, effect on mineral uptake, **XIII**, 357
- vines, **XI**, 67
- by wiring, **XIV**, 509; **XV**, 501
- Rio Grande Valley, Texas, ornamentals in, **XIII**, (956)
- Rio Negro, Argentina, plant protection, **XV**, 1541, 1542
- Ripening of fruit, *see* Fruit ripening and Ethylene treatment
- Risalewala fruit garden, **XI**, 221
- Robinia pseudacacia*—
- drought resistance in, **XIV**, 1120
- var. *monophylla* atypical form, **XV**, 234
- as tree for pastures, **XII**, 735
- Rocky Mountains, vegetational zonation, **XIII**, (1138)
- Rodent pests, control, **XIV**, 1164, 1637; **XV**, 872
- Root(s)—
- absorption activity, **XV**, 955, 956
- aeration in citrus, **XI**, 874
- behaviour, porosity of orchard soils affects, **XII**, (1270)
- cellar, a practical farm, **XI**, 279
- crop—
- cultivation of vegetable, **XIV**, 231
- pests and diseases, **XIII**, 862
- seed economy, **XII**, 142
- seed production, **XIII**, 457, 1099
- cushions and stalagmites, **XII**, 1173
- decomposition of plant, rate of, **XI**, 674
- disease fungi, **XV**, 915, 1573
- diseases, rejuvenating trees damaged by, **XIII**, 117
- examination facilitated by growth in water vapour, **XIII**, 27
- excised—
- leguminous, **XIV**, 1014
- onion, **XIV**, 1736
- studies of absorption and exudation, **XIV**, (1030)

SUBJECT INDEX

Root(s) (continued)—

excretions, microbial activity influenced by, XII, 358

growth—

apple, *see* Apple

in Californian orchards, XIV, 1511

in citrus, XII, 1461

in *Coffea arabica*, XII, 245; XIII, 1013

in dry districts, XII, (367)

influenced by heteroauxin in wheat, XIII, (367)

hop, XIII, 1371

measurement, Hohlov's apparatus, XV, 13

mechanism, XIII, 1116

and pH of medium, XIII, (367)

scion influence on vine, XV, 1520

and soil management, XV, 489

soil structure and, XIV, (458)

in tobacco, XI, 500

of tropical crops, XII, 1023; XV, 280

and water availability, XI, (695)

injury from cultivation, XIV, 1013

metabolism and translocation of nutrients in plants, XIII, 1117

nodules—

in *Elaeagnus angustifolia*, XV, 479

leguminous, red pigment possibly haemoglobin in, XV, 398, 959

organisms, bacteriophage of, XV, 1027

observation boxes, XII, 770

polyploidy inducement in, XIII, (33)

pruning affects growth in peach, XIII, 1190

raising trees on own, XII, 378; XIV, 459

regeneration after frost in apples, XIV, 1584

respiration, measurement, XV, 417

response to growth substances, XIV, 457

rots of non-cereals, XIV, 1135

and soil—

colloid interaction, XV, (34), 957

electrochemical relations between, XIII, 5

studies, a container for, XII, 771

submersion and photosynthesis in apple, XIII, 55

terminals, nutrition affects in lime [*Tilia*] trees, XIV, 1028

tip squash technique, XII, (1195)

vegetables in England, XI, 102

virus behaviour in, XI, 1214

water—

intake, XI, (380); XIII, 24

transport control in, XII, (39)

Rootone, *see* Growth substances, proprietary substances

Rootstocks—

in Algeria, XIII, 733; XIV, 1494, 1495

apple, *see* Apple

apricot, *see* Apricot

cacao, XI, 1385

certification in England, a plea for national, XIII, 710

cherry, *see* Cherry

citrus, *see* Citrus

clonal, variations in, XI, 707

conference at Geneva, N. York, 1940, XI, 43

for deciduous fruit trees, *see also* individual fruit types—

in Algeria, XIII, 733; XIV, 1494, 1495

in Argentina, XI, 385

dwarfing, XIII, 735

in England, XV, 1442

in Germany, XIV, 55, 56, 496

nematode-resistant, XIV, 1147

Rootstocks for deciduous trees (continued)—

in New Zealand, XIV, 50

in Palestine, XV, 942

in Switzerland, XV, 944

in U.S.A., XI, 706; XIV, 1440

vegetative, XI, 707

diploid *versus* triploid as apple, XI, 713

and frost hardiness—

in citrus, XI, 857, 858

in deciduous fruits, XIII, 798

grapefruit, *see* Grapefruit

growing trees on own roots, XII, 378; XIV, 459

lemon, *see* Lemon

limes, *see* Lime

Malpighia, XI, 955

Malling, *see* Apple rootstocks

mango, XIV, 1365; XV, 936

nursery in New Zealand, XIII, 1158

orange, *see* Orange

for ornamental crabs, XI, 1288, 1289

peach, *see* Peach

pear, *see* Pear

plum, *see* Plum

for pome fruits, *see* Pome fruits

propagation methods, XIII, 1160-1163; XIV, 967

prune, XIV, 500

Prunus spp., XII, 799

regarded as a locality factor, XIV, 1056

rose, *see* Rose

rubber, *see* Rubber

: scion influence in vines, *see* Vines

seed stratification, XIV, 1188

seedling, the importance of, XIV, 53, 1055, 1498

stone fruit, *see* Stone fruit

and storage quality, *see* Storage quality

effect on vitamin C content in citrus, XII, 994

Rosa—

acicularis, high vitamin C content, XIV, 820

damascena flowers contain antibacterial substances, XIV, 1638

gallica cuttings, date of setting, XV, 765

species—

origin, XIII, 235

salt resistance, XV, 1849

vitamin C content, *see also* Rose hips, XIII, 236; XIV, 821-823, 1395-1397; XV, 324, 325

Rose—

black spot (*Diplocarpon rosae*), XIV, (834); XV, 766, 1858

breeding, combining beauty with utility in, XIV, 824

bushes in store, growth substances and, XIII, 238; XIV, 292

cuttings—

growth substances for, XI, 506

soil pH for, XV, 1363

diseases, XV, (245)

flower fading in, XII, 542

growing—

hybrid tea, XV, 1857

in India, XIII, (541)

in Indiana, XV, 1856

in Texas, XI, (138)

in Virginia, XV, 1857

growth, soil aeration and, XII, 543

hips—

carotene and lycopene in, XIV, 1960; XV, 2025

powder, spray dried, XIII, 1584

SUBJECT INDEX

Rose hips (*continued*)—

- products, Australian work on, **XIII**, 1630
- vitamin C and other vitamins in, **XI**, 490; **XII**, 1132, 1451-1453; **XIII**, 236, 638; **XIV**, 289, 820-824, 1968; **XV**, 332, 890, 891
- vitamin P in, **XIV**, 1968; **XV**, 332
- industry in Bulgaria yields to peppermint, **XII**, 1398
- leaf blotch, *see* black spot
- low temperature and desiccation cause death, **XIV**, 293
- methyl bromide toxicity to, **XI**, (1300)
- mosaics, **XI**, 823; **XIII**, 239
- nutrition and flower production, **XIV**, (834)
- origin of cultivated, **XI**, 507, 1293; **XIII**, 235
- powdery mildew (*Sphaerotheca pannosa*) control, **XIII**, 1456; **XV**, (774)
- pruning, **XIII**, (240)
- rootstocks, **XII**, 1456; **XIII**, 237; **XIV**, 1440
- soil management in greenhouse, **XIII**, 953
- soilless culture, **XV**, 1352
- sprays—
 - disodium ethylene bisdithiocarbamate, **XV**, 616
 - nicotine sulphate, **XI**, 508
- stocks, breeding, **XV**, 1352
- storage of cut, **XII**, 1111
- stored, growth substance to retard shoot development in, **XIII**, 238; **XIV**, 292
- sulphur affects growth, **XIII**, (240)
- wilt virus, **XIV**, (297)

Roselle, *see* *Hibiscus sabdariffa*

Rosellinia—

- apple rootstocks resistant to, **XIII**, 1094
- pepo* parasitism, **XII**, 246

Rosette, *see* Little leaf

Rotations—

- agricultural, **XV**, (1406)h
- in England, crop, **XV**, 135

Rotenone—

- bearing plants, extractives added to oil sprays, **XV**, 1644
- in *Derris elliptica*, **XV**, (1658)k, q

Rothamsted Experimental Station Centenary 1943, **XIII**, 1101

Rots—

- bacteria causing soft, **XI**, 788
- of non-cereals, root, **XIV**, 1135

Rough bark viruses in fruit trees, **XIII**, 98Roumania, fruit trees in, **XV**, 1415

Royal Botanic Gardens—

- Kew, centenary, **XII**, 724
- Peradeniya, **XIII**, (576)

Rubber, *see also* *Hevea* and *other plants*—

- formation in plants influenced by nutrition, **XV**, 185

(*Hevea*), *see also* *Hevea*—

- bark rot due to *Phytophthora* spp., **XIV**, 1916; **XV**, 1968
- beetle pests, **XII**, 258
- breeding, **XI**, (248)
- brown bast, **XI**, 583; **XV**, 1969
- budded stumps and stumped buddings, **XIV**, 1362; **XV**, 1957
- budding procedure, **XIV**, 1358, 1359, 1915; **XV**, 300
- census, methods to facilitate, **XII**, 1051
- characters transmitted by vegetative propagation, **XV**, 928
- chlorosis of seedling, **XV**, 1967

Rubber (*Hevea*) (*continued*)—

clonal—

- characteristics in Belgian Congo, **XIV**, (1932)
- variation, **XIV**, 1913

clone—

- identification, **XI**, 938

tests—

- in Netherlands East Indies, **XII**, 1512, 1513; **XV**, 1958-1960
- at high elevations, **XI**, 578

- cover crops for, **XI**, 939, 1409; **XII**, 642, 1054; **XV**, 1963

crown developer, **XI**, 1405

- diseases due to wounds, **XII**, (259)

- erosion and control in, **XII**, 637; **XIV**, 1361; **XV**, 1963

- foliage comparisons in, **XII**, 1056

- food crop production among young, **XII**, 635

- growth substances for, **XII**, 716

- hemicellulose reserves in embryo of, **XV**, 1961

- improvement in Cameroons, **XIII**, 286

- investigations in Ceylon, **XII**, 1049, 1050; **XIII**, 1539; **XV**, 1957

latex—

- from buddings on *H. spruceana* hybrids, **XII**, 1055

- colour measurement, **XII**, (1095)

- creaming, **XI**, (641)

- investigations in London, **XII**, 1151

leaf—

- analysis and nutrition, **XI**, 1406

- blight resistance (*Dothidella ulei*), **XIII**, 290; **XIV**, 1912

- manuring, **XI**, 579, 923, 1384, 1407, 1408; **XII**, 257, (627), 636; **XIII**, 664, 1022, 1023; **XIV**, 957, 1355, 1356; **XV**, 928, 1957, 1962, 1963

- mite control, **XII**, 644

- mycorrhiza, **XI**, 940

- nutrients removed from and restored to soil by, **XII**, (627)

- nutritional status, **XI**, 1406

- Nysius* sp. pest, **XII**, (1518)

- origin and distribution, **XI**, 1351

- Oidium* leaf disease, **XIV**, 957, 1917; **XV**, 1970, 1971

- packing raw, **XI**, 1413

- Periconia* blight, **XV**, 1966

- pests and diseases, economic effects, **XIV**, 1918

planting—

- in Belgian Congo, **XIII**, 607

- in Colombia, **XV**, 1291

- in Costa Rica, **XV**, 1956

- in Guatemala, **XIV**, 890; **XV**, 1972

- in Honduras, **XV**, 847

- improvement of material for, **XI**, 212; **XIII**, 1538

- in India, **XIII**, 1536

- in Malaya in 1940, **XII**, (259)

- in Nigeria, **XV**, 299, 940

- in tropical America, plantation, **XIII**, 1537

- powder from, known as mealorub, **XI**, 640

- production and use, a manual, **XV**, 2066

- pruning, **XI**, 1410

- rain guards for tapping panel, **XIV**, 1357

- rat prevention, tar dangerous in, **XII**, 1059

- regeneration problems, **XI**, 577

SUBJECT INDEX

Rubber (*Hevea*) (continued)—

- replanted areas, manuring for, XII, 636
- replanting, XIII, 664, 1023; XIV, 1356, 1363
- Research Board of Ceylon, Rep. on work of, 1940-1943, XII, 324; XIII, 664; XIV, 957; XV, 928
- research in East and Mid Java, XI, 1383
- Research Institute of Malaya A.R. 1939 and 1940, XI, 1043; XII, 716
- research at West Java Research Station, XII, 251, 619
- for root making, use of, XII, (259)
- root—
 - competition of shade trees, XI, 576
 - diseases, XI, 577; XIV, 1363; XV, 928
 - rootstocks, XII, 254, 638; XIII, 664
 - scrap and lump, drying, XII, 643
 - seed germination tests, XII, 253
- seedling(s)—
 - chlorosis, XV, 1967
 - nurseries, XI, 575; XIV, 1360
 - at Pangkalan, XII, 1052
 - twinning of, XI, 213, 1403; XII, 1514; XIII, 289, 664; XIV, 957
- selection—
 - in Belgian Congo, XIV, 1913
 - at Besoeki Research Station, XI, (1402)
- as shade for cocoa, XV, 848
- shade trees and root competition, XI, 576, 1384
- snail control in young, XIII, 606
- soil management, XII, 637; XIV, 1361; XV, 1963
- straight planting on undulating land, XII, 637
- tapping—
 - diseases, XI, 218, 219
 - prior to regeneration, XI, 577
 - systems, XI, 215-217, 580-582, (941), 1411, 1412; XII, 255, 256, 634, 639, 640, (641), 1053, 1057; XIII, 664, 1019, 1020, (1021), 1539; XIV, 957, 1354; XV, 301, 928, 1964, 1965
- thinning out, XIV, 347
- trunk measurements with dendrometer, XI, 1404
- twinning, *see* seedling twinning
- war problems in Ceylon, XII, 634
- wind damage and resistance, XII, 1058; XIV, 1914
- wound healing and bark renewal, XI, 214

(Not *Hevea*), *see also individual species*—

- Asclepias*, *see Asclepias* spp.
- callus formation in Russian rubber plants, XV, 1141
- Canadian possibilities, XV, 925, 926
- Carpodinus hirsuta*, XIV, 716
- castilla or Castilloa, *see Castilla elastica*
- Ceara, XIII, 1386; XIV, 716
- of central Europe, XII, 1069
- of central and north-eastern Europe, XIV, 698
- Chrysanthamnus (nauseosus)*, XIII, 499, 1379
- Clitandra orientalis*, XII, 1068; XIII, 1025
- Cryptostegia* spp., *see Cryptostegia*
- Euonymus* spp., XII, 1069
- Euphorbia tirucalli*, XIV, 716
- Ficus* spp., XIV, 716
- flagellates of, XIV, 721
- Funtumia elastica*, *see Funtumia*

Rubber (Not *Hevea*) (continued)—

- growing—
 - in Colorado, possibilities, XV, 180
 - in England, XIII, 1378
 - in Gold Coast, XV, 376, 377
 - in North America, XIII, 499
 - in Uganda, XIII, 1025
 - in U.S.S.R., XIV, 975
- of Guatemala, XIV, 1919; XV, 1972
- guayule (*Parthenium argenteatum*), *see Guayule*
- Haplopappus* spp., XIII, 1379
- illustrations of, XV, 2066
- investigations at Waite Institute, XIV, 1452; XV, 1348
- kok saghyz, *see Kok saghyz*
- krym saghyz, *see Krym saghyz*
- Landolphia* spp., *see Landolphia*
- Manihot glaziovii*, XIII, 1386; XIV, 716
- Mascarenhasia elastica*, XII, 1068
- milkweed, *see Asclepias* spp.
- Palay rubber vine, *see Cryptostegia*
- Russian, *see also individuals*, XIV, 2029
- Scorzonera*, *see Scorzonera*
- Smilax* sp., XIII, 176
- Solidago* spp., *see Solidago*
- survey of Western N. America, XIII, 1379
- synthesis of rubber in, XV, 1138-1140, 1142
- Taraxacum* spp., *see Kok saghyz and Krym saghyz*
- various, XIII, 173, 176, 499, 903
- wild in East Africa, XII, 1068
- production in New Guinea and Papua, XII, 252
- and resin compounds of milkweed and other plants, XIV, (412)
- sources, plant and synthetic, XIII, 173
- synthetic, XI, 639
- Rubbery wood in apple (Lord Lambourne), XV, 549, 935, 1024, 1561
- Rubcov nursery, XIV, 44
- Rubidium—
 - content in sea and fresh water plants, XV, 8
 - effect on growth affected by potassium and other nutrients, XV, 415
- Rubus*, *see also individuals*—
 - cane gall, *Phytomonas rubi*, XI, 757
 - Gloeosporium venetum* on, XII, 1302
 - parvifolius*, characteristics and breeding, XI, 59
 - seed germination, aids to, XI, 407
 - studies at East Malling, XI, 58, 79
 - vegetative propagation, XI, 1130, 1133
- Ruchichoy Experiment Farm in Guatemala, XII, 1482
- Rudbeckia* sp. affected by light and temperature, XI, 358, (380)
- Rue, Syrian (*Peganum harmala*) and its product, XV, 1737
- Ruga verrucosans*, name proposed for beet curly top virus, XIV, 232
- Rumex thyrsiflorus*, a tanning plant, XV, 172
- Russia, *see U.S.S.R.*
- Russian dandelion, *see Kok saghyz*
- Russula* genus of edible fungi, XIII, 229
- Rust fungi, growth substances and the, XIV, (161)
- Rust removal from garden tools, XI, 354
- Rutabagas, nutrition of, XV, (758)

SUBJECT INDEX

- Sabour, fruit research at, **XI**, 1019
 Sabour Fruit Res. Stat. A.R. 1938/39, **XI**, 1044
Saccharum officinarum, see Sugar cane
 Safflower (*Carthamus tinctorius*)—
 manuring, **XII**, 947
 as source of oil, **XIV**, 707
Sahlbergella singularis pest of cacao, see Cacao
Saissetia—
 coffae, a possible vector of phloem necrosis
 in tea, **XIV**, 956
 haemisphaerica, **XIII**, 1012
 oleae, **XI**, 159, (530); **XII**, (1328), 1474; **XIII**,
 559, (562), 978
 Salad crops—
 bulletin on, **XII**, 901
 dandelion as, **XII**, 502
 forcing, **XII**, 484
 Salisbury Agric. Exp. Stat., N. Rhodesia, A.R.
 1940/41-1943/44, **XII**, 1481; **XIV**, 965,
 2027; **XV**, 1360
Salix—
 caprea a source of tannin, **XIV**, 1297
 cuttings—
 growth substances liberated during rooting
 of, **XV**, 1405
 photoperiodism affects, **XII**, 745
 rooting of, **XV**, 170, 231
 spp., seven British, **XV**, 230
 Salsify (*Tragopogon porrifolius*)—
 diseases, **XII**, 147
 leaf spot (*Stemphyllum botryosum*), **XII**, 952
 Salt—
 accumulation in irrigated soils, **XIII**, 784
 agricultural, as substitute for potash ? **XII**,
 914
 in atmosphere, estimation of, **XII**, 1187
 as manure for onions not good, **XV**, 1760
 Salting—
 affects vitamins in vegetables, **XIII**, 1069
 peas, **XIV**, 1998
 vegetables, **XI**, 309; **XIII**, 1068, 1069, 1613;
 XIV, 376, 1426; **XV**, 1333
 El Salvador—
 Indian gardening methods, **XV**, 1234
 research station in, **XIII**, 1502
Salvia—
 glutinosa, pollination, **XV**, 240
 splendens an oil plant, **XV**, 268
 Samaricum in pea nutrition, **XIII**, 535
Sambucus racemosa, nutritive value, **XIV**, 1402
 Sample surveys, large scale, **XV**, (432)
 Sampling—
 dates, importance in nutritional trials, **XIV**, 71
 tree branches, method of cutting in, **XI**, 1083
 vegetables for quality tests, **XIV**, (1298)
 San Andrés research station, El Salvador, **XIII**, 1502
 Sand culture, see also Soilless cultivation and
 Water culture—
 climate affects, **XIII**, 695
 equipment and technique, **XI**, 665, 672;
 XIII, 1132; **XIV**, 828, (834); **XV**, (432)
 for peach nutritional tests, **XV**, 60
 of peas, **XIV**, 810
 salts and pH affect, **XIII**, 207, 695
 of tomato, see Tomato
 of vegetables, **XIV**, 646
 Sanguinarine hydrochloride induces tetraploidy,
 XIII, 241
 San Martín en Corrientes, Argentina, vegetation,
 XIV, (19)
Sanninoidea exitiosa, **XIV**, 600, (635), 1631; **XV**,
 577, 1628
Sanseveria—
 bacterial soft rot, **XIV**, (1803)
 chimaeras, **XV**, (431)
 East African possibilities, **XII**, 610
 zeylanica, polarity in cuttings of, **XIV**, 1472
 São Paulo, Brazil, plant diseases, **XIII**, 1006
 Santonin, *Artemisia cina* a source of, **XV**, 174
 Sap pressure and exudation, **XI**, 363
Sapium sebiferum (Chinese tallow tree) an oil
 plant, **XV**, 268
 Sapodilla (*Achras zapota*)—
 products, **XI**, 314
 propagation, **XIV**, 891, 951
 Saponin—
 of fenugreek seed, **XIII**, (656)
 horse chestnut a source of, **XV**, 193
 plant sources of, **XIII**, 655; **XV**, 655
 Sapote, the White (*Casimiroa edulis*)—
 in California, **XIII**, 987
 in Florida, **XV**, 1908
 Sarson (*Brassica campestris* v. *sarson*), **XIV**, 1716
Sassafras spp. in Tucumán, **XII**, 1583
 Sausage tree (*Kigelia* spp.), movement of solutes in,
 XI, 908; **XIII**, 1632
 Sawdust—
 effect on plant growth, **XIV**, 9
 in the garden, **XIV**, 1199
 for mulching apple trees, **XIV**, 1521
 for potato and tomato soils in Alabama,
 XIV, 1772
 Sawfly, see *Hoplocampa*
 Saxaul tree of Central Asia (*Haloxylonetum*
 persici), **XIII**, 1002
 Scab (*Venturia* spp.), see under hosts
 Scale insects—
 black, see *Saissetia oleae*
 of cacao, **XII**, 247
 California red, see Citrus scale, red
 of citrus, see Citrus scales
 control by fungi, **XIII**, 1012
 hard wax (*Ceroplastes sinensis*), **XIV**, (1662)
 on olive, **XII**, 1328
 parasitized by bacterium, **XII**, 1005
 Parlatoria blanchardi, **XII**, 231
 San José, see also *Aspidiotus perniciosus* and
 Quadraspidotus perniciosus
 San José—
 scales mistaken for, **XII**, (659)
 the scurfy (*Chionaspis furfura*), **XIV**, 1150
 in Washington, control, **XII**, 1322
Scapteriscus spp., **XIV**, 666
Scaptomyza flava pest of oil plants, **XIV**, 215
 Scarifier, a single disc seed, **XIII**, 859
Schinus molle for windbreaks, **XIV**, 316
Schoenocaulon drummondii an insecticidal plant,
 XV, 1363
 Science—
 for the farmer, A.R. Pa agric. Exp. Stat.
 1940/41, **XII**, 719
 and the land, a lecture, **XII**, 725
 formulæ, **XII**, 312
 and fruit growing, **XII**, 1207
 relations between pure and applied, **XIV**, 428
 Scientific Reports of the Imperial Agricultural
 Research Institute, New Delhi, 1939/40
 and 1940/41, **XI**, 1515; **XIII**, (672)
 Scientific and technical societies in Canada, **XIII**,
 339
Scilla maritima, **XV**, 1742
 Scion influence—
 on frost resistance in roots, **XI**, 748
 on stock in apples, **XII**, 49, 50

SUBJECT INDEX

- Scirtothrips*, see Citrus thrips
- Sclerosperma manii*, vegetable ivory from, XV, 271
- Sclerotinia*—
fruticicola, XII, 440; XIV, (547); XV, (599), 1580
fructigena, XIV, 548
gladioli, XV, 241
laxa, XI, 1163; XII, 1309; XIII, 1280; XIV, (547), (635)
minor, XV, 1155
in potato tubers, XI, (1229)
sclerotiorum, XIII, 520; XIV, 1267, 1436; XV, (758), (1071), 1892
spp. (brown rot) on apples, see Apple brown rot
sp. on stone fruits, XI, 1172, (1174); XV, (598)
- Sclerotium*—
cepivorum, XV, 689
rolfsii, XI, (1235); XIV, 1711
- Scorzonera*—
diseases, XII, 147
genus, monograph on, XV, (1852)x
tau-saghyz, see Tau saghyz
- Scott Agricultural Laboratories, Kenya, work in 1943, XV, 830
- Scottish agriculture in wartime, XII, 1165
- Scouring works waste as manure for vegetables, XIV, 1197
- Sea buckthorn (*Hippophaë rhamnoides*) as source of vitamins, XIV, 1403
- Seaweed—
for agar manufacture, XIV, 1670; XV, 9
economic importance of, XI, 682; XIII, 1104, 1633
for mulching apple trees, XIV, 1521
as source of potash in N. Zealand, XIII, 393
- Secchium edule* cultivation, XII, 589, 656; XIII, 621; XIV, 1369
- Seed(s)—
boron content, XV, 1379
certification in U.S.A. and Canada, XIV, 1187
commercial, in Maine, XII, (462), (1347)
content of calcareous clay soil, XIV, (19)
crops, spatial isolation, XIV, 167; XV, 131
disinfection, see also treatment, XI, (380); XII, 605, 909, 1391; XIII, 464, 533, 667, 858; XIV, 1188, 1277, (1298); XV, 132, 223, 224, (597), (598), 626-628, 651, 727, 750, 1094, 1119, 1120
dormancy, importance of oxygen in, XV, 1384
drying, cucumber, XV, 202
electrolysis, XIV, 1191
examination of horticultural, XIV, 1108
extraction by acid method, XIII, 1417; XIV, 256, 1268, 1269
fungicide detection on, XV, (1658)r
germination—
in CO₂, XV, 607
of difficult, XV, 5
in fruit, influence of parent on, XIII, (1177)
mercury vapour affects, XII, 1196
moon affects, XI, 1076; XII, 1
nitrogen aids, XIII, 537
of small fruit, XI, 407
sphagnum moss for use in, XV, 464
sulphanilamide affects, XIV, 1473
temperature and light affect mulberry, XI, (1079)
and growth substances, see Growth substances
impressions on plastic films, XI, 667
improvement in Turkey, XIV, 1457
- Seed(s) (continued)—
inoculation of legume, XIII, 942, 946; XIV, (290)
insertion under bark of other plants, XII, 1209
mixer, XI, 353
number affected by pollination in Clementine orange, XI, 511
of oil plants, illustrated, XII, 943
pickling, see disinfection
potato, see Potato
Production Committee set up by N.I.A.B., XIV, 1445
production—
cauliflower in tropics, XV, 1991
Italy as possible site, XIII, 133
in Kenya, vegetable, XV, 130
manual on agricultural, XII, 1563
miniature thresher for, XIII, 138
regulations in Algeria, XV, (1006)
in S. Africa, XIV, 1188
storage of root crops meant for, XII, 1109
sugar beet, XIII, 1362
vegetable, see also Vegetable, seed
vegetable marrow, XIII, 1413
of vegetables and root crops, XIII, 1099
zinc and, XII, 1353
protectants, XII, 1367; XIII, 858, 860, 881
proteins, XIII, (697)
pure, a new concept of, XIII, (139)
rules and regulations, U.S.A., XIII, (139)
showing special dormancy, XIV, 1190
a single disc scarifier for, XIII, 859
size affects crop in vegetables, XI, 446
stereophotography, XII, (1195)
storage, XI, 1077, 1078, (1079), 1355; XII, 16; XIII, 134, 532, 1562, 1563; XIV, 328, 1188; XV, 386
stored, gall midge larvae among, XIV, 1954
stratification of rootstock, XIV, 1188
testing—
farm and garden, XV, 606
methods, XV, 416
Station at Potchefstroom, function of, XIV, 1188
thresher, a single plant, XIV, (641)
treatment, see also disinfection and Vernalization—
with colchicine, XV, 971
heat and aeration, XV, 948
with manganous sulphate, XV, 971
with naphthalene, XIV, 1241
peach, XI, (737); XV, 1432
to prolong viability, XV, 6
with silver nitrate, XIV, 1698
with Spergon, XIII, 533; XIV, 1800
for spice plants, XV, 132
with sulphuric acid, XIII, 701
viability—
air temperature and humidity affect, XI, 1077; XIV, 328
light and, XII, 16; XIV, 437
tests, XI, 669
treatment to prolong, XV, 6
vitamins in dehydrated, XIII, 1582
weight—
of cultivated plants, XV, 1374
: vegetative growth ratio, XII, 357
and volume of, XV, (972)
X-rayed, XIII, (367)
Seedlessness and citrus economics, XI, 1305

SUBJECT INDEX

- Seedlings—
 growth substance treatment, **XV**, 421
 response to vitamin B₁ negative, **XI**, (737)
 treatment, work at and suggestions by the
 John Innes Institution, **XV**, 935, 1088
- Selection in perennial crops, **XI**, 175
- Selenium—
 availability to plants, **XII**, 749
 -containing plants, toxicity to red spider, **XI**,
 (441)
 effect on plants, **XV**, 1380
 occurrence in plants, **XII**, 748; (1195
 in U.S. soils, **XII**, 34, (1195)
- Selenothrips rubrocinctus*, **XIII**, 285, 668, 1528;
XIV, (903)
- Senecio jacobaea* control, **XV**, 114
- Senescence, physiological factors affecting, **XIII**, 678
- Senna (*Cassia angustifolia*), **XII**, 1583
- Septoria—
apii, see Celery blight
gladioli, **XV**, 241
lactucae, **XII**, 270
 leaf spot—
 on raspberry, **XIV**, (635)
 of tomato, **XI**, 481; **XV**, 737
passiflorae, **XIV**, 1144
pisi, **XII**, 980
 spot of citrus fruits, **XI**, 155
- Sesame—
 breeding, **XV**, (431)
Cercospora sesami attacks on, **XII**, 632
 hybrid, **XIII**, 1530
 natural and controlled pollination, **XV**, (227)
- Sesamin determination in sesame oil, **XIV**, (1431)
- Sesamum*—
orientale in Ceylon, **XIII**, 604
 spp. in Queensland, **XV**, 387
- Sesbania aegyptiaca*, shade tree for oranges, **XII**,
 993
- Sewage—
 disposal for crops, **XII**, (1095)
 farms, vegetable manuring on, **XIV**, 649
 "milorganite" minor element nutrients from,
XII, 821
 nature and value of phosphorus in, **XIII**, 1136
 sludge—
 composts, straw and, **XV**, 1481
 for vegetables, **XIV**, 1200; **XV**, 1082
- Sex differentiation due to intracellular process,
XIV, 440
- Sexual development in plants, moisture conditions
 affect, **XV**, 201
- Shade trees—
 Dadap, increases soil nitrogen, **XV**, 1247
 maintenance, manual on, **XIII**, 337
 management, water relations to, **XIII**, 680
 for particular crops, see those crops
 in Uganda, **XV**, 280
- Shaker, a mechanical, **XII**, 769
- Shallot—
 growing—
 in England, **XIII**, 185; **XIV**, 747
 in N. Africa, **XIV**, 1255
 shanking, **XIV**, 240, 1738
 a suspected virus of, **XV**, 196
- Shelter—
 belts, see Windbreaks
 trees in war and peace, **XV**, 914
- Shepherdia argentea*, a dry land fruit, **XIII**, 777
- Shoot—
 apex, microtechnique, **XI**, 351
 emission from punched leaves, **XIV**, 1307
- Shoot (*continued*)—
 : root ratio and moisture relations in tomato,
XV, (431)
- Shops, value of cold store to fruit, **XIV**, 911
- Short day plants, etc., see Photoperiodism
- Shot-hole borer (*Anisanandrus dispar*), **XIV**, 141
- Shrubs—
 from the Altai, **XV**, 237
 at Cawthron Institute, N.Z., **XV**, (1865)b
 cultivation in England, **XV**, 919
 diseases of, **XIII**, 790
 for England, a list, **XV**, 228
 ornamental, for Brooklyn, **XV**, 1340
 propagation by seed, **XV**, 49
 for Rhodesia, **XIV**, 1874
 transplanting, **XIV**, 1543
- Siberia—
 horticultural research at Altai station in,
XIV, 461
 small fruit breeding, **XIII**, 1207
- Sida* spp. for use as textiles, **XIV**, 682
- Sierra Leone—
 agricultural methods, **XI**, 173
 Dep. Agric. A.R. 1938-1940, 1943, and
 1941 and 1942, **XI**, 1045; **XII**, 332, 1158:
XV, 1361, (1366)
- Silage from apple pomace, **XIII**, 1076
- Silkworm raising, **XIV**, (534)
- Silts, fertilizer value of Punjab river, **XV**, 273
- Silvanus surinamensis*, pest of dried fruit, **XII**, 1538
- Silver—
 compounds to hasten larval emergence in
 eelworm, **XIII**, (1358)
 fungicidal action, see Sprays, fungicides,
 silver
 leaf (*Stereum purpureum*)—
 on raspberry, **XV**, 102
 relation of papery bark canker to, **XIII**,
 1273; **XIV**, 1600
 a short description, **XV**, 1034
- Simaruba glauca*, a dysentery specific, **XII**, 588
- Sinapis alba*, germination inhibitors in, **XIII**, 689
- Sind, irrigation in, **XV**, 813
- Sirocco effect on orange, **XIII**, 960, 961
- Sisal Exp. Stat., Tanganyika, A.R. 1938 and 1943,
XII, (1054); **XV**, 389
- Sisal—
 industry prospects in Tanganyika, **XIII**, 1008
 origin and distribution, **XI**, 1351
 reproduction by seed, **XII**, 1032
 soil salinity destructive to, **XIV**, 1882
- Slugs—
 (*Agriolimax agrestis*), **XII**, (462)
 control, **XII**, 240, 458, 879
 effect of air, light, humidity and temperature
 on, **XIII**, (129)
 seasonal activity and field sampling, **XIV**,
 1680
- Small fruits—
 in Alabama, breeding material, **XI**, 1129
 breeding, **XI**, 1129; **XIII**, 1207
 cultivation—
 on arsenic contaminated soils, **XV**, 76
 in Illinois, **XI**, 738
 in Kansas, **XI**, 739
 manual, **XIV**, 948, 2012, 2013
 in S. Africa, **XV**, 75
 diseases and pests, **XIII**, 116; **XV**, (1658)c
 insects, **XIV**, (1184)
 irrigation, **XIV**, 529
 liming, **XIII**, 412
 magnesium sulphate for, **XV**, 1495

SUBJECT INDEX

- Small fruits (*continued*)—
 mulching, XIII, 411
 seed germination, XI, 407
 tests at Kapuskasing, Ont., XIII, 663
 varieties for the English garden, XV, (83)
 vitamin C content, XIII, 1041
- Smilax* sp., rubber analysis, XIII, 176
- Snail control—
 in citrus orchards, XIII, 563; XV, 800
 of European brown, XII, 568
 methods in general, XII, 879
 by poison baits, XIII, 1507
 in young rubber, XIII, 606
- Snapdragon, *see Antirrhinum*
- Snow—
 conservation, XIV, 77
 damage to fruit trees, XIII, 90
 repairs to tree damaged by, XI, 1154
- Snowberry (*Symphoricarpos racemosus*) seed germination, XIII, 537
- Soči subtropical research station, XV, 1196
- Sodium—
 acetate effect on plant growth, XIV, 185
 chloride—
 catalysts for, XIII, 128
 removal from soil and pots, XII, 38
 chloride a substitute for potash, XII, 914
 cyanide—
 for control of damping off, eelworm and rootworm, XV, 1773
 as fertilizer, XV, 1406d
 as herbicide, XV, 1654
 determination in plants, XII, 23
 importance in plant nutrition, XII, (982)
 monofluoroacetate as fungicide, XV, 1648
 o-phenyl-phenate as dip for oranges, XI, 270
 salts affect tomato growth, XIV, 779
 sulphate in tomato nutrition, XII, 177
- Soft fruits, *see* Small fruits
- Soil(s)—
 acidity and tea, XIV, 1344
 aeration—
 of fruit, XII, 815
 and rose growth, XII, 543
 and tree physiology, XIII, 677
 alkali, reclamation, XIII, (67)
 amendment with dichloropropylene and dichloropropane, XIV, 360
 analysis—
 Florida, XI, 1350
 of horticultural, in Canada, XV, 1081
 manual, XIV, 2008
 market garden, in Switzerland, XV, 944
 methods, *see also* Analysis, spectrographic, XI, 22, XV, 406
 atmospheres, orchard, XIV, 1071
 auxin determination in, XII, 1192
 of British Honduras, XII, (273)
 of Carcagente, orange, XII, 1008
 citrus, *see* Citrus
 colloids, interaction between roots and, XV, (34)
 conservation, *see also* erosion—
 in Belgian Congo, XII, (1518)
 in Illinois, XV, 1483
 in Java, XII, (1095)
 orchard cover crops and, XII, 812-814
 in Puerto Rico, XII, 1024
 in Rhodesian native reserves, XII, (1496)
 Service, work of U.S., XII, 359
 copper and zinc determination in, XII, (1195)
 cultivation, physical research, XII, (736)
- Soil(s) (*continued*)—
 deficiency symptoms, XIII, 93
 density determination, XIII, (31)
 disinfection, *see* sterilization
 drift, relation of vegetative cover to, XIII, (67)
 erosion, *see also* conservation—
 in the Bombay Deccan, XII, (603)
 in British Colonial Empire, XIV, 1881
 in citrus orchards, XIII, 1477
 control methods, XII, 35-37, 359-361, 600-602, (603), 637, 1010, (1095), (1270); XIII, 579, 1112-1114, 1504; XIV, (19), 317, 1361, 1880, 1881; XV, (432), (865), 938, 1482, 1483
 dams, XII, (1270)
 grass stop-wash lines to control, XIII, 1504
 in Jamaica, XIII, 579
 in Java, XII, 602
 in Kenya, XII, 601
 mapping of, XIII, (1138)
 in Matengo Highlands and control, XIV, 1880
 in Michigan, XII, (736)
 in Middle East, XV, 938
 in New Jersey, XII, (736)
 in New South Wales, control, XII, 360, (1270)
 in Northern Nigeria, control, XIII, 1112
 problems, nature of, XIV, 10
 in Rhodesia and control, XII, 1010; XIII, 1113
 in rubber plantations, *see* Rubber (*Hevea*), soil management.
 in Salta, Argentina, and control, XIV, 317
 in Sierra Leone, XI, 173
 in S. Australia, XV, (432)
 surface stones affect, XIII, 1111
 in Tanganyika, XII, (603), (1095)
 terracing to check, XV, 1482, 1483
 in Trinidad, XII, (603)
 in Uganda, control of, XII, 600
 in Union of S. Africa, XIV, (19)
 U.S. Soil Conservation Service work on, XII, 359
 vegetation, soil character and, XII, (603)
 in Victoria, Aust., XII, 361
 by wind, XI, (695); XII, 35; XIII, (31)
- fertility—
 assessment of, XIII, (1138)
 and cacao, XIV, 330
 indicators, XII, 751; XIII, 1503
 maintenance for horticultural crops, XV, 1080
 phosphate content an indicator of, XII, (659)
 of Florida, analysis, XI, 1350
 fumigant, methyl bromide-dichlorethyl ether, XII, (1347)
 fumigation, *see also* "sterilization", XII, (1347); XIV, 657, 661; 1681; XV, 741
 fungi, manual of, XV, 1342
 glasshouse, *see* Glasshouse
 of Hawaii, XIV, (365)
 heating—
 electrical, XIII, 851
 glasshouse, XIV, 654
 lime and pH requirements in Guatemala, XV, 1921
 management—
 apple, *see* Apple
 avocado, *see* Avocado

SUBJECT INDEX

Soil(s) management (*continued*)—

- blueberry, *see* Blueberry
- orchard, **XI**, 399, 725-727; **XII**, 81, 82, 401-403; **XIII**, 58, 59; **XIV**, 513, 963, 1076, 1517; **XV**, 490
- peach, *see* Peach
- peach and apricot, **XIV**, 511
- and soil permeability, **XIV**, 1461
- for vegetables, **XIII**, 852
- and mineral composition of crops, **XI**, 686
- moisture—
 - affects fruit size, **XII**, 1254
 - in cherry orchards, **XIII**, 397
 - conservation—
 - in the open, **XI**, 692; **XII**, 401, 402; **XV**, 1369, 14061
 - in pots by methyl cellulose, **XV**, 763
 - in vineyards, **XIV**, 542
 - determination, **XI**, 26, 690, 691, (695); **XII**, 209, 210; **XIII**, (375); **XIV**, (458)
 - distribution in containers, **XII**, 33
 - holding capacity related to natural vegetation, **XIII**, 1115
 - for lemons and avocado, **XII**, 583
 - mulch affects, **XIV**, 77; **XV**, 401
 - pear, *see* Pears
 - penetration, soil management and, **XIV**, 1461
 - and photosynthesis, **XI**, 1111
 - and plant growth, **XV**, 960
 - and respiration, **XI**, 1111
 - and salt concentrations in growth of beans, **XIV**, 282; **XV**, 746
 - and seed germination, **XIV**, 645
 - tension and moisture retention in irrigated soils, **XV**, 399
 - and tomato acid content, **XI**, 119
 - and transpiration, **XI**, 1111
 - and wilting, **XV**, 1729
 - for truck crops, **XIII**, (231)
- mulching, *see* Mulching
- of N. Zealand, water holding capacity affected by vegetation, **XIII**, 1115
- nitrate, cultivation affects, **XI**, 1119
- nitrogen—
 - invertase a measure of, **XI**, 688
 - losses influenced by green manuring, **XII**, 1188
- orchard—
 - in New York, **XII**, 815
 - porosity affects root growth, **XII**, (1270)
 - in Switzerland, **XV**, 62
 - in Worcestershire, **XV**, (1006)
- organic matter—
 - decomposition, **XI**, 23
 - provided by sugar cane trash, **XV**, 824
 - studies at Vineland, Ont., **XV**, 1485
 - work at Macaulay Institute on, **XV**, 1354
- osmotic pressure and conductivity in relation to plant growth, **XIII**, 1118
- oxidation reduction potential, **XII**, (367)
- pasteurization, electric devices for, **XI**, 28
- peach, *see* Peach
- pH—
 - of glasshouse, **XV**, 1690
 - of irrigated orchard, **XII**, 84
 - preferences, **XII**, 32; **XV**, 1921
- physical properties, **XI**, (965)
- and plant composition, **XI**, 686
- potassium, orchard cultivation affects, **XI**, 1117
- potted, studies of, **XIII**, 853

Soil(s) (*continued*)—

- in relation to fruitgrowing in New York, **XII**, 815
- reserves, estimation, **XIV**, 6
- and root anatomy in French crab apples, **XI**, 711
- saline, plants for growing in, **XV**, 236, 239
- salinity—
 - and plant growth, **XV**, 961
 - sisal destruction by, **XIV**, 1882
- sampling, **XII**, (659), (1095)
- sandy, phosphatic manuring in, **XIII**, 1135
- sickness, formalin for, **XV**, 1656
- sodium—
 - calcium, percolation of water in, **XIII**, (1138)
 - permeability and hydrolysis of, **XIII**, (1138)
- solutes, upward movement, **XI**, 27
- solution concentration affects growth, **XI**, 1071; **XIII**, 21
- of South America, **XIII**, 1109
- stabilizing by vines, **XIV**, 462
- sterility, leaf analysis as guide to, **XIII**, 372
- "sterilization", *see also* fumigation, sickness, and treatment—
 - chemical methods, **XII**, 181, 605, 1575; **XIII**, 194, 665; **XIV**, 777, 1170, 1641; **XV**, 259, 742
 - John Innes methods, **XI**, 654; **XV**, 16, 17, 1091, 1092
 - by steam, **XI**, 1512; **XII**, (982); **XIII**, 665; **XIV**, 1783; **XV**, 616, 617, 742
 - tank for home, **XII**, 362
 - various methods, **XII**, 605; **XIV**, 1203
- structure and root development, **XIV**, (458)
- survey—
 - of Annapolis Valley fruit area, **XV**, 488
 - in Ireland, apple, **XIII**, 1178
- for table grapes, Paarl, **XIII**, 1224
- temperature—
 - and blossoming, **XIV**, 59
 - affects growth of hemp, **XIV**, 1690
 - and growth of roots and tubers, **XV**, 145
 - in Stellenbosch orchard, **XIV**, (1083)
- toxicity due to arsenic accumulation, elimination of, **XV**, 76
- treatment, *see* "sterilization"
- types and influence on fruitgrowing, **XIV**, (528)
- water, *see* moisture
- wilting percentage, **XIII**, 22
- zinc accumulation in, **XI**, 24
- Soilless cultivation, *see also* Water culture and Sand culture—
 - carnations, **XIV**, 294, 825-827, 1303
 - chemical testing of nutrient solutions for, **XIV**, 2007
 - gravel culture system, **XI**, 1207
 - greenhouse crops, **XI**, 12
 - in Iowa, **XIV**, 1440
 - manuals, **XI**, 320-322; **XIV**, 415
 - notes on, **XIII**, (31)
 - roses and snapdragon, **XV**, 1352
 - survey of progress, **XII**, 730
 - tomatoes, **XIV**, 778
- Solanum*—
 - commersonii*, environment affects tuber formation in, **XI**, 1222
 - dulcamara*, carotene and lycopene in, **XIV**, 1960
 - lycopersicum*, *see* Tomato

SUBJECT INDEX

Solanum (continued)—*melongena*, see Eggplant*muricatum*, XIII, 344*nigrum* as a food plant, XV, 1851*nodiflorum*, a source of dye, XV, 169*quintense*, XV, 1990*tuberosum*, see Potato

Solar propagator for breadfruit, XV, 1976

Solenopsis germinata var. *rufa*, sex forms, XIII, (298)*Solidago*—*odora* an oil plant, XV, 1363

spp., rubber plants, XIII, 499, 1385; XIV, 720

Somaliland Protectorate, agriculture, XIV, 867

Somarium salessowii, vitamin C content, XIV, 1397*Sorbus* sp., see Mountain ashSoursop (*Annona muricata*) seed oils, XIII, (656)

South Africa, Union of—

apple growing in Langkloof Valley, XV, 436

citrus exports, XI, 518

citrus growing in, XI, 1301

Dep. Agric., A.R. 1939/40-1943/44, XI, 327;

XII, 720; XIII, 1634; XIV, 1448; XV, 1362

food production in war, XIV, 1448

fruitgrowing in, XV, 36

fruit production report, XI, 32, 699

pear exports 1930-9, XII, 827

tobacco soils, XI, 127

vegetable production in, XIV, (1803); XV, 1074

vegetable seed production in, XIII, 454-457

Western Cape Province, deciduous fruitgrowing in, XI, 33, 698, (737)

South America—

competitor in fruit production to U.S.A., XII, 781

geology, XIII, 1110

research institutes, XII, 728

soils of, XIII, 1109

South Australia—

horticulture in, XV, 434

Minist. Agric. A.R. 1939/40, XI, 1046

South West Africa, farming in, XIII, 704, 1486

Southern Rhodesia—

Dep. Agric. and Lands A.R. 1944, XV, 2078

Dep. Agric., Plant Pathology Branch, A.R. 1940, XI, (1054)

plant diseases, XIII, 1499

Soviet botanists, work of, XIII, 703

Sowing, use of deterrent agents when, XII, 1367

Soya bean—

boron absorption, XIII, (227)

breeding and cultivation, German aims in 1943, XIV, (805)

carotene in, XI, (131)

composition, XI, (131); XII, (982)

cultivation—

in Brazil, XV, (758)

in Germany, XIV, (805)

in Great Britain, XI, 808, 1275

in Guatemala, XV, 1840

Indian possibilities, XII, 658

in Iowa, XI, (821); XIV, 275

in Jamaica, XI, 1444

in Rhodesia, XI, (131); XII, 184; XIII, (227)

in S. Africa, XII, 517

in U.S.A., XI, 486; XV, (1853)c

in Victoria, Aust., XIV, 273

deficiency symptoms, XV, 1685

Soya bean (continued)—

diseases in Maryland, XIV, 1287

extract for seed beds of forest trees, XII, 348

floral initiation—

affected by grafting, XII, (1454)

in Biloxi, XI, 487; XII, (1454)

flour for salad dressings, XI, 311

flower formation affected by temperature,

XI, 1070

fumigation injury, nicotine, XIV, 1289

growth influenced by aeration and soil temperature, XIV, 1285

growth substances hasten maturity, XIV, 280

iron-manganese ratio affecting, XII, (982)

leaf spot (*Helminthosporium* sp.), XV, 1839

light and temperature affect, XI, (380); XII, 1444; XIV, 802

lipositol in, XIII, (702);

lipoxidase in, XIV, (412)

losses in seedling, XI, 1276

lupin grafts, XII, 761

manuring, XI, 124, 125; XIV, 281, 803, 804, 1286

metabolism studies, XIII, 226

minor element studies, zinc, XIV, 804

mosaic, XIV, 1288

nodule organisms, XII, (982); XIV, 281

nursery plots, border effects, XIV, 277

Penicillium disease, XV, 751

phosphatides as spray deposit builders, XIII, 1302

photoperiodism in, XI, (380); XII, 1444;

XIII, (1454); XIV, 802

plastics, XI, (641), 1505

range of adaptation, XI, (821)

respiration and storage, XV, (758)

seed—

ascorbic acid in, XV, (1853)h

hygroscopicity, XIV, 702

production, XIV, 1188; XV, 752

viability, XIV, 278, 279; XV, 752

seedling losses in, XII, 185

soil pH, XIV, 803

sowing, methods, XII, 272

storage, XV, (758), 1305

temperature affects photoperiod reaction in, XIII, (1454)

thresher and gleaner, XV, 1358

unripe, for human consumption, XV, 2027

varieties—

in Nebraska, XV, 1828

in Puerto Rico, XIV, 1796

in S. Rhodesia, XV, 1360

in Trinidad, XIV, 276

registration, XIV, 275

vegetable, XIV, 275, 1284; XV, 222, (227)

yield and quality tests in Maryland, XIII, (227)

Spacing, orchard, XV, 504, 1455

Spantioza erytreae, XIV, (858)

Spanish—

bearberry (*Arctostaphylos uva-ursi*), leaf

biochemistry in, XV, 1740

Guinea, agriculture of, XV, 271

needle (*Bidens chinensis*), XIV, 1891

plants, catalogue of, XV, (972)

Territories in the Gulf of Guinea, Annual Report on Agriculture, 1941, XV, 933

Spartina townsendii, XI, 1282

Specific gravity related to quality in horticultural products, XIV, 1566, 1958

Specimens, botanical, collection and despatch, XIV, (458)

SUBJECT INDEX

- Spectrochemical analysis, a graphic calculator for, XV, 418
- Spectrograms of leaf extract, XI, 350, 668
- Spectrograph compared with other analytical apparatus, XIII, 370
- Spectrographic analysis, XI, 1080, (1092); XII, 1184; XIV, 445, 1443; XV, 7, 8, 1354, (2059)s
- Spectrophotometric methods for determining fruit maturity, XIV, 1938
- Spergon—
as root dip for sweet potatoes, XIII, 984
a seed protectant, XIII, 533; XIV, 1800
- Sphaceloma*—
fawcetti and others, XI, 1321, 1322
ricini, XV, 1838
- Sphaerella linorum*, XIII, 476, 882
- Sphaeropsis malorum*, XIV, (547), 1138
- Sphaerotheca*—
mors-uvae, XI, 1162
pannosa, XIII, 1456; XV, (774)
- Sphagnum moss—
as medium for plant growth, XV, 1087
for packing stored beets and carrots, XIV, 2019
peat for propagation and mulching, XII, 533, 534
prevents damping off, XII, 534; XV, 464
use in medicine, XV, 173
wound dressings, XIII, 703
- Spice plants—
Cinnamomum spp., XV, 1287
cultivation in Germany, XV, (1852)h
oils as germicides, XIII, 1614
seed treatment, XV, 132
soil and climatic conditions for, XIV, 711
- Spilanthus acmella*, insecticidal plant, XV, 1653
- Spilographa cerasi* in Sweden, XIII, 1295
- Spinach—
bacterial soft rot (*Erwinia carotovora*), XV, 199
blight, a virus, XIV, 247
boron and nitrogen nutrition of, XV, 697
CO₂ affects vitamin C in stored, XI, 286
dehydration, XIV, 936
fertilizers, phosphatic, XIII, 459
growing in phosphorus-deficient soil, XIV, 1746
leaf proteins, XIV, (759)
leaf vegetables used as, XIII, 1404
losses of seedling, XII, (194)
mite pest, *Tyroglyphus dimidiatus*, XV, (1852)j
nutrition of, XII, 962; XIV, 1747
pH effect on nutrient absorption, XII, 1386
photoperiodic response in, XIII, (947); XV, 696
salting, XV, 1333
varieties, American, XIII, 132
- Spinacia*, cell division in, XV, (1853)m
- Spindlebush, form of training fruit trees, XIV, (92)
- Splitting in young stems and root tips, regeneration after, XII, 1174
- Spoil mounds, inducement of vegetation on, XV, 33
- Spondias mombin*, XII, 648
- Sponge—
loofah (*Luffa aegyptica*), XIV, 252, 1756
the vegetable (*Luffa cylindrica*), XIV, 251
- Spore germination in presence of copper and sulphur, XIII, (123)
- Sporonema oxycocci* in stored apples, XIV, 1942
- Sports—
apple, *see* Apple bud mutations
inducement of, by chemical treatment, XIV, 960
- Sprays and spraying, *see also sub-divisions* fungicides, etc., and main headings Dusts, Fungicides, Insecticides, etc.
- Sprays and spraying—
by aeroplane, XV, 500
aerosol, use of, XIV, 1273, 1620; XV, 385, 422, 423, 1490, 1697, 1698, 1847
aluminium arsenate, XI, 435
apparatus—
affects coverage, XIII, 1313; XIV, 150
boom sprayers, XV, 260, (598), 1638
for dusting, XIV, 151
electrical, XV, 1641
laboratory, XI, 776; XIV, (1662)
the Speed sprayer, XIV, 1656; XV, 116, 1066, 1359, 1638
tank fillers, XV, 1640
technical basis, XIV, (1662)
tests of new, XIII, (845); XIV, 1180; XV, 1066, 1068
arsenical, XI, 162, 434; XII, 556, 1309; XIII, 1296, 1302; XIV, 626, 754, 1173; XV, 251, 1054, 1099
arsenical substitutes, XII, 461; XIV, 549, 625, 1441, 1451
bactericides, *see* Bactericides
bees affected by common, XII, 391
benzene hexachloride or 666, XV, 589, 1056
bordeaux, XI, (779), 1382; XII, 133, 136; XIII, 108, 1315; XIV, 618, 619, (635), 672
calcium arsenate, XI, 434; XV, 1775
calendar—
for Argentina, XV, 1636
East Malling 1942 and amendments, XII, 1334; XIV, 1643
Long Ashton, 1942 revision, XII, 887
for Michigan, XV, 1635
Nova Scotia, for apples and pears, XV, (1071)
- carbolineum—
for aphid and red spider, XV, (599)
spring, XIII, 1323
for soil treatment, XIV, 1170
for stimulating young trees, XIV, 459
in summer, XIV, 548
- cationic phenyl mercury as apple scab eradicant, XIV, (547)
- caustic, effect on apple leaves, XIV, 1650
- certification—
in N. Zealand, XIII, 1309
in Switzerland, XIII, 1310
chart illustrated, XIV, 149
chemical, in Denmark, XV, 582
cherry fruits affected by, XV, 1582
chlorophenates as eradicant, XIV, (547)
compatibilities, XV, (598)
contact poisons and insect cuticle, XV, (599)
- contract in Kent, XIV, 613
- copper—
affect apple growth and yield, XIII, 443
-arsenic insecticides, XIV, 1648
O. R. Butler's works on, XII, 1578
compounds, oil soluble, XIII, 1316
compatibility with nicotine-bentonite insecticides, XIII, 1451
cuprous oxide, XI, 1325; XV, (128)
effect on powdery mildews, XII, 889

SUBJECT INDEX

Sprays and spraying, copper (*continued*)—

- effect reduced by organic materials, XIII, 120
- fungicidal value, XIII, 121-123; XV, (596)
- new, XI, (779)
- oxychloride, XV, 1591
- protective value, XIV, 153
- saving, XIV, 1171
- sebacate, XIV, 1640
- substitutes for, XII, 1338; XIII, 445, 937, 1317; XIV, 1441
- sulphate as eradicant, XV, (597)
- xanthates, XIII, 121
- creolin, XIV, 1178; XV, 1098
- DDT—
 - aerosols for vegetable pests, XV, 1697, 1698, 1847
 - analysis in kerosene-based sprays, XV, (1658)u
 - for ants, various, XV, 1898, 1924
 - for apple blossom weevil, XIV, 1653; XV, 1059
 - bees affected by, XIV, 624
 - for cabbage pests, XV, 1775
 - for cherry fruit fly, XIV, 1152; XV, 1611
 - in citrus orchards, XIV, 855, 1655, 1841; XV, 258, 801
 - for codling moth, XV, 1046, 1359, 1621, 1622
 - drug aspects, XV, 802
 - for flea beetles, XV, 1767
 - as fungicide, XV, 1060, 1648
 - gesarol in the orchard or vineyard, XIV, 116, 1441
 - for grape leaf hopper, XV, 1603
 - for greenhouse pests, XV, 1762
 - insecticidal properties, report from Long Ashton, XV, 1649
 - for Japanese beetle, XV, 1609, 1610
 - limitations of use in horticulture, XV, 121
 - New Zealand trials, XV, 2075
 - in New York State, XV, 1356
 - for onion pests, XV, 1762, 1764
 - Ontario results with, XIV, 1172
 - for oriental fruit moth, XIV, 1655; XV, 1623
 - for pests affecting human health, XV, 120
 - for potato insects, XV, (1185)
 - preparations, XV, (1658)p
 - for quince tree hopper, XV, (1658)z
 - against raspberry beetle, XV, 572
 - reviews of work on, XIV, 1652, 1653; XV, 122, 1056, 1057, (1071), 1650, (1658)v
 - for scale insects, XV, 261
 - and soil organisms of beneficial nature, XV, 588
 - spray deposit determination, XV, (1071)
 - tests by Bureau of Entomology, XIV, 1654
- damage, *see* injury
- to delay flowering for frost protection, XIII, 811
- deposit builders, soya bean phosphatides, XIII, 1302
- deposits vary with apparatus, XIV, (1662)
- derris, *see* Derris
- dew evaporation hastened by, XI, (779)
- dichloroethyl ether against plum curculio, XIII, 433
- 1-dichloro-1-nitroethane against wireworms, XIII, (1307)

Sprays and spraying (*continued*)—

- 2,3-dichloro-1,4-naphthoquinone for tomato leaf defoliation diseases, XV, (598)
- dichlorophenoxyacetic acid, *see* Growth substances
- dinitro compounds to reduce fruit set, XIV, 87
- dinitroresol, XIII, 844; XV, 492
- 2,4-dinitro-6 cyclohexylphenol against leaf hopper, XIV, 1622
- dinitro-ortho-cresol, XI, (779), 1204; XIV, (635), 1628; XV, 576, 1651
- disodium ethylene bisdithiocarbamate, XIV, 616
- dithane, XV, 1053
- for dormancy breaking, *see* Dormancy breaking
- dormant, XI, 775
- dormant oils, efficiency of, XII, 1345
- drier, a laboratory, XIV, (19)
- dual purpose, XI, 1204
- economic poisons in California 1939-40, XII, (138)
- Elgetol, XII, 1262, (1318); XIII, 119; XIV, 1080, 1136; XV, 64, (505), (598), 1053
- emulsions for horticultural, XV, 1466
- ethylene dichloride for peach tree pests, XIV, 160, 1631
- fermate [ferric dimethylthiocarbamate], XIII, 1318; XIV, 134, (547), 1137, 1649, (1662); XV, (598), 1053
- Florida, XI, 1203
- fluorine residues, XII, (462)
- formalin, for soil treatment, XIV, 1170
- after frost damage, XV, 1556
- fruit fall retarded by, *see* Fruit fall
- fruit thinning, *see* Fruit set, spraying of fruit trees, loss of mixture during, XIII, 841
- fungicidal—
 - action of mercury, XIII, (123)
 - v. fungistatic, XIV, (635)
 - substitutes for copper and zinc, XII, 1338
- fungicides, *see also* Fungicides—
 - a catalogue, XIV, 615
 - cationic, pyridine and quinoline derivatives, XV, (598)
- copper, *see* Sprays, copper
- disodium ethylene bisdithiocarbamate, a water soluble protectant, XIV, 616
- effectiveness classified, XIV, (635)
- eradicant, XIII, 119; XIV, (547), 617
- evaluation of, XIII, 1314; XIV, (635); XV, 583, (598), 1646
- irrigation system a means of application, XV, 1100
- Juglone, a promising, XIV, (547)
- Lignasan, an eradicant, XIII, 119
- mechanism of action, XIII, (1329); XIV, (635)
- mercuric chloride, XIV, 1259
- Methasan, XV, (598)
- new, XV, 1053
- nicotinium derivatives, XV, (598)
- oil-soluble copper compounds as, XIII, 1316
- organic, for apple, XV, 584
- β -phenethyl isothiocyanate a possible, XIV, (635)
- protective, tenacity of, XII, 890
- Puratized N_2X , XV, 943
- the salicylates, XIII, 445
- silver compounds as, XII, (138); XIV, 1179, 1698
- sulphur, elemental, XV, 1647

SUBJECT INDEX

Sprays and spraying, fungicides (*continued*)—

- tests and terminology, XV, 1646
- thiuram sulphides, XIII, 444
- work in Rhode Island, XV, 943
- Zincate, zinc salt of dimethyl dithiocarbamic acid, XV, (598)
- Gammexane, XV, 589, 1056
- herbicides, *see also* Weeds, control—
 - ammonium sulphamate, XII, 884
 - carbon disulphide, XIII, (129)
 - chlorate toxicity, XIII, (129)
 - dichloroethyl ether, XII, (462)
 - 2,4-dichlorophenoxyacetic acid, XV, 581, 1702
 - 2,4 dinitro-*o*-secondary butyl phenol, XV, 1655
 - dinitro-ortho-cresol, XV, 1104, 1105, 1765
 - growth substances as, XV, 1105, 1106
 - kerosene, XIV, (1803); XV, 1103, 1703
 - for ragweed, XV, 1701
 - for ragwort, XV, 114
 - Sinox, XIV, 181, 1689
 - for skeleton weed (*Chondrilla juncea*), XII, (1333)
 - sodium chlorate, XI, 38, 131; XIII, 128; XIV, 608; XV, 114
 - sodium cyanide, XV, 1654
 - sulphuric acid, XIII, 465, 513, 864, 1399; XIV, 744, 745; XV, 1103-1105, 1765
 - various, XIII, 833, 834; XIV, 1635, 1636; XV, 1105, 1106, 1340
 - for vegetables, oil, XV, 684
- hydroxyquinolene sulphate for apple canker, XV, 1031
- immunizing and invigorating, XV, 1642
- 1,3-indandiones, insecticidal properties, XII, (1347)
- injury, *see also* residues and under particular crops—
 - arsenic, lime used to prevent, XV, 118
 - from ethylene dichloride, XIV, 160, 1631
 - from pyrethrum and rotenone dusts, XV, (1071)
 - from Spergon to flax, XIV, 197
 - Swiss observations, XV, 944
- insecticidal—
 - bio-assay, XIII, 1311
 - properties, examination for, XIV, 1644
 - tests, XII, 886
- insecticides, *see also* Insecticides and winter washes—
 - anabasine compounds, XIII, 431
 - biological evaluation of ovicides, XIV, 1646
 - castor bean extractives, XV, 937
 - a catalogue, XIV, 615
 - characteristics of certain, XIII, 439
 - composition and preparation for use, XIV, 620
 - contact, testing, XI, 776; XIV, (1662)
 - copper-arsenic compounds, XIV, 1648
 - creonaph, XIV, 158
 - cryolite, XIII, 1300; XIV, 754, 1328; XV, 1054, 1055, 1775
 - cubé resins, XIII, 1479, 1480; XIV, 313
 - cubé vegetable oil dust, XIII, 1349
 - DDT, *see* Sprays, DDT
 - Delphinium brownii* extracts, XI, 1200
 - derris, *see* Derris
 - dithiocarbamic acid derivatives, XII, (1347)
 - dusts, action of inert, XIV, 622, 1647

Sprays and spraying, insecticides (*continued*)—

- effect on man of various, XI, 179
- efficiency, particle size in relation to, XII, 1340
- fish poison plants as, XI, 180; XIII, 577
- fluorine compounds substitutes for rotenone dusts, XIV, (1662)
- Gammexane (666), XV, 589, 1056
- gesarol, *see* Sprays, DDT
- hexachlorobenzene or 666, XV, 589, 1056
- incompatibility in, XIV, 1658
- Lonchocarpus nicou*, *see* *Lonchocarpus* in Maine, XII, (462), (1347)
- new, XI, 438; XIII, 840; XV, 117
- Nirosan, XIV, 1441
- non-arsenicals, XIV, 604
- oil-toxicant, XIV, 854
- organic compounds as, XI, 433; XII, (1347); XIV, 1645; XV, 117, 1061, (1185)
- Paranaph, XIV, 158
- plants, *see* Insecticidal plants
- pyrethrins, *see* Pyrethrins
- pyrethrum, *see* Pyrethrum
- resistance to, XIV, 621
- rotenone, XIII, 1301, 1321, 1322; XV, 1054, (1071)
- sodium fluosilicate, XIV, 1328
- in soil affect plant growth, XIII, 440
- tartar emetic, XI, 528, 1329; XIII, 555, 557, (562), 1345, 1347, 1455; XIV, 852, 1737, 1886
- Tephrosia virginiana*, *see* *Tephrosia*
- tests, XII, (462), (1347); XIII, 126; XIV, (635), 1644, 1646, (1662); XV, 1649
- thiocyanate, XV, 1055
- toximeter, XIII, 126
- for vegetables, XV, 1097, 1098, (1185)
- Veratrum viride* extracts as, XI, 440
- wood smoke and soot as, XV, 948
- xanthone for codling moth and other pests, XIV, 144, 604, 1625
- yam bean extract, *see* Yam bean
- Isothan Q15 [lauryl isoquinolinium bromide] against apple scab, XV, 2077
- Kolofog, XIV, 1650
- lauryl pyridinium chloride, XIV, 1649
- lead arsenate or substitutes, XI, 434, 436; XII, 1346; XV, 1055
- leaf structure affected by, XI, (779)
- Lignasan, XIII, 119
- lime-copper-arsenic, XI, 758
- lime-sulphur and lead arsenate, lime inclusion in, XIV, 1651
- machinery, *see* apparatus
- material shortage, remedy for, XIII, 1312
- mercurated lead arsenate, XV, 1652
- metal dialkyl dithiocarbamates, XIII, 843
- nicotine—
 - aerosols, XIV, 1620
 - for aphids, XIV, 1619, 1620
 - bentonite, XI, 436; XIII, (451); XV, 1050
 - different types, XII, (462); XIII, 1297, 1299, 1302, 1480
 - ovicidal properties, XIV, 623
 - sulphate, XI, 508
 - toxicity, XIV, 157
 - in Washington State, XV, 1054
- nitrogenous bases, efficacy of some, XI, 439
- nozzles and pressure effects, XIII, 842

SUBJECT INDEX

Sprays and spraying (*continued*)—

oils—

- deposit, **XIII**, 449
- effects of, **XII**, (1347); **XIV**, (1803)
- and emulsions, **XII**, (1347); **XIV**, 1177
- lubricating, **XIII**, 1324
- petroleum, **XI**, 1199; **XII**, (462), (1347); **XIII**, 811; **XV**, 593, (599)
- rotenone substances added to, **XIV**, 1174; **XV**, 1644
- and scald in pears, **XI**, 73
- and storage quality of fruit, **XV**, 873
- summer type petroleum, **XIII**, 1325
- tar, **XI**, 1198; **XIV**, 86
- of vegetable origin, **XII**, 888

organic insecticides, *see* Sprays, insecticides

organic matter addition affects, **XIII**, 120

ovicides, *see also* winter washes, **XI**, 439; **XV**, (599), 1651

phenothiazin, **XII**, 461, (462); **XV**, 1618

phenyl mercury chloride, **XIII**, 1356

and photosynthesis, **XII**, 133, 134; **XIV**, 1649; **XV**, 595

piperic acid against house flies, **XV**, 1062

polynitro derivatives, **XII**, (1347)

pre-harvest—

for cherries, organic materials in, **XIV**, 154

to retard fruit fall, *see* Fruit fall

pyridine and quinoline derivatives as cationic fungicides, **XV**, (598)

in Quebec orchards, **XV**, 590-592

to reduce transpiration, **XV**, 497

to retard fruit fall, *see* Fruit fall

to reduce fruit set, *see* Fruit set

products, proprietary, in U.K., registration scheme, **XIV**, 152

programmes, *see* calendar

quinoline, **XI**, 439

residues—

arsenic in vegetables, **XIV**, 1679

on cabbage, **XIV**, 754

copper determination, **XIII**, 446

fluorine, **XV**, 1643

in grubbed apple soils, toxicity of, **XV**, 1458

lead arsenate, on apple, **XI**, 777

removal, **XI**, 86; **XII**, (462), 891; **XIII**, 124, (125), (1329); **XV**, 942

sulphur, **XIV**, 1854

retention, its wetting power and, **XII**, 135

ricin and ricinine for codling moth, **XV**, 1047

russetting by bordeaux, **XII**, 136

sodium thiocyanate to increase fruit colour, **XIV**, 521

Spergon causes abnormalities in flax leaves, **XIV**, 197

spreaders, **XIII**, 1326

and storage life of apples, **XIII**, 839

sulphamic acid, **XII**, 1336

sulphur and effects, **XI**, 1173, 1202; **XII**, 137, 1337; **XIII**, 443

timing of, **XV**, 1637

toxicity data interpretation, a symposium, **XII**, (1347)

Veratrum viride extracts, **XI**, 440

water composition, **XII**, 460

wheat flour as adhesive for, **XV**, 1065

winter washes, *see also* oil, **XI**, 1204; **XII**, (1347); **XIV**, 159, 1168, 1169; **XV**, 944

zinc, substitutes for, **XII**, 1338

Spring frosts, *see* Frost

Sprouting seeds, vitamin C content, **XV**, 2020, 2021

Squash—

borer (*Melittia satyriniformis*), **XII**, (880)

boron deficiency, **XII**, 1426

bug, *Anasa tristis*, **XV**, 1792

composition, **XV**, 1785

dehydration, **XV**, 1328

discussion on, **XIII**, 519

growing in Queensland, **XIV**, 769

the Hubbard, **XI**, 472

manganese nutritional problems, **XII**, (1454)

mosaic virus, **XIV**, 1754

Phytophthora capsici on fruit of, **XV**, 1791

preparation from passion fruit and mango, **XIV**, 1956

Squill (*Scilla maritima*), **XV**, 1742

Squirrel, control of grey, **XII**, (880)

St. Lucia Dep. Agric. Rep. 1939-1943, **XI**, (1054), (1526); **XII**, 1581; **XIII**, (1638); **XV**, (391)

St. Margrethen cold store, **XII**, 1098

St. Vincent agric. Dep. A.R. 1939-1943, **XI**, 1047, (1526); **XIII**, (347); **XV**, (946)

Stacking boxed fruit, **XI**, 968

Stagonospora curtisii, **XIV**, (1312)

Staining plant tissue, **XI**, 19

Stains for micro-organisms, **XI**, 664

Stalagmites, root, **XII**, 1173

Stamen, origin of the, **XIV**, 15

Standardization of fruit and vegetables, **XIII**, 1206

Standards *versus* half-standards for pome fruits, **XIV**, 1052

Star apple (*Chrysophyllum cainito*) budding, **XI**, 946

Starch—

acorns a source of, **XV**, 150

cassava, from Nigeria, **XIII**, 654

affected in cuttings by growth substances, **XIII**, 203

constitution of, new light on, **XII**, 1137

determination in plant materials, **XI**, (681); **XV**, (1336)

formation in plants, climate influences, **XV**, 151

Starter solutions for vegetable crops, **XI**, 1256; **XII**, 496; **XIII**, 1421, 1422

Station fédérale d'essais viticoles et arboricoles, Lausanne, Reports 1939-1942, **XII**, 1154; **XIV**, 1441

Stations, Experiment, bulletins issued by U.S. 1939-1942, **XII**, 733; **XIV**, 2015

Statistical—

analysis, **XIII**, (1138); **XIV**, (1476); **XV**, (432), (972)

method, **XI**, (1092); **XII**, (1454); **XIV**, (1030)

Stauropus alternus, **XII**, 1574

Steirastoma depressum, **XIV**, 1902

Stem builders, *see* Apple and Pear double working

Stem length related to cell length, **XII**, (752)

Stemphylium—

botryosum, **XII**, 952

congestum on apple, **XV**, 1575

Stephanoderes hampei, **XIV**, 344; **XV**, 837

Sterculia tomentosa oil plant, **XV**, 359

Stereophotography, seed, **XII**, (1195)

Stereum purpureum, *see* Silver leaf

Stictis panizzei, **XV**, 1592

Stilboestrol, a growth substance, **XV**, 1809

Stock: scion—

effects in *Artemisia* and *chrysanthemums*, **XII**, 540

SUBJECT INDEX

Stock: scion (*continued*)—

- influence in early stages at different localities, XIV, 496; XV, 1446
- reciprocal influence in fruit trees, XIV, 496

Stomata—

- bacterial invasion through, XV, (598)
- on citrus fruit, XI, 844
- on kaki leaf, XI, 888
- measurement, XII, 1176
- movement and carbon assimilation, XI, (1073)

Stone fruit—

- brown rots, *Sclerotinia laxa* and *fructicola*, XI, 1172
- capsid (*Megacoelum modestum*), XI, 80
- dips, fungicidal, XV, 383
- frost resistance in, XII, 426; XIII, 809
- growing in England, manual, XIV, 949
- gummosis, XI, 1324
- pruning, XIII, 1188
- rootstocks for, XII, 799, 1230; XIII, 733; XIV, 496; XV, 1446
- warm winters affect, XII, 1239
- viruses of, XIII, 812; XIV, 570, 1592

Stones, surface, effect on erosion and soil physics, XIII, 1111

Stony pit in pears, a virus, XV, 92

Storage, *see also* Preservation—

- of apples, *see* Apple
- apricot, XI, 971; XV, 945
- asparagus, XIII, 1049
- avocado, *see* Avocado
- banana, *see* Banana
- beet, XIV, 1727, 2019
- blueberries, XIII, 306
- of bulbs, *see* Bulbs
- cabbage, *see* Cabbage
- of carrots, *see* Carrot
- cauliflower, XIV, 378
- celery, *see* Celery
- cellars for, XI, 966; XII, 1162; XV, 316, (2011)c
- cherry, *see* Cherry
- citrus, *see* Citrus
- cold—
 - principles of, XI, 967
 - Swiss work, XII, 1097, 1098
 - in U.S.A., regulations, XII, 1096
- controlled atmosphere, *see* gas
- cranberry, XI, (984)
- dips—
 - apple, *see* Apple dipping
 - for cucumbers, XIII, 309, 310
 - for oranges, XIV, 1947
 - for fruit, XI, 1460, 1461; XII, 1103-1105, 1147; XV, 383, 934
 - for vegetables, XIV, 1947
- diseases, theories on, XIV, 1386
- emanations from fruit in, XI, 262-264; XII, 1530; XIV, 367, 906, 910, 1941
- expansion chamber for cold, XIV, 366
- farm—
 - construction, XV, 868
 - vapour barriers in, XIV, 1935
- of foodstuffs—
 - effect of temperature variations on, XV, (321)
 - by freezing, XIII, 299
 - in the tropics, XI, 249, 609; XII, 672
- frozen—
 - dessert fruit, XII, 1102
 - fruit product, a new, XV, 899

Storage, frozen (*continued*)—

- fruits and vegetables, microscopic studies of, XIII, (335)
 - locker, *see also* pack
 - locker—
 - for fruits and/or vegetables, XI, 614, 973-975; XII, (288), 1101; XIII, 300, 1566; XIV, 369, 1390, 1934; XV, 353, 1307, 1352, 2000, 2001
 - preparing products for, XII, (1536)
 - pack—
 - asparagus, XV, 1308
 - bilberries, XI, (291)
 - breeding as an aid to, XV, 2002
 - choice of fruit and vegetables for, XIV, 937
 - cider, XI, (291)
 - citrus and citrus juice, XI, 1455
 - foods, desiccation in, XI, 1454
 - foods suitable for, XI, 1453
 - fruit—
 - sampling, XIII, 1561
 - suitable for, XIV, 937
 - syrups and concentrates, XV, 898
 - and vegetable preparation for, XV, 353
 - microbiological studies, XI, (291)
 - peas, *see* Peas
 - product, a new fruit, XV, 899
 - raspberries, XI, (291); XII, 673
 - strawberries, XV, 1308
 - vegetables, micrococci in, XI, (291)
- of fruit—
- in Bombay, XV, 1998
 - Canadian work, XIV, 2019
 - cooling load, XV, 315
 - German manual on, XII, (1536)
 - home, XIII, 624, (1573)
 - physiological problems, XV, 1299
 - in Punjab, XI, 251
 - Scandinavian and German papers on, XIV, 459
 - in shops, XIV, 911
 - in Switzerland, XII, 1162; XIV, 937, 1451; XV, 1996, 1997
 - tropical, XII, 280, 1108
- fumigation, XII, 275
- gas, XI, 250, 252, 256, 286, 611, 613, 971, 972, 981, 1451, 1518; XII, 277, 285, 322, 666, 1111, 1146, 1147, 1524-1526, 1533; XIII, 303, 304, 344, 627, 628, 1036, 1557, 1560, 1565, 1568, 1630; XIV, 367, 370, 420, 906-908, 913, 1380, 1440, 1937, 1950, 2025; XV, 68, 869, 1998
- grape, *see* Vine, table grapes
- grapefruit, *see* Grapefruit
- home, construction, etc., of, XIII, 624, 1573
- lemon, *see* Lemon
- loss of weight affected by size of fruit, XI, 610
- mango, *see* Mango
- melon, XI, 276
- minor elements, effect, XIV, 1730
- moisture loss prevention in, XIV, 368
- nutritional value affected by, XII, 290
- of nuts, pretreatment, XIV, 374
- olives, XIII, 327; XIV, 373, (918)
- onion, *see* Onion
- onion seed, *see* Onion seed
- orange, *see* Orange
- orchard, XI, 1448
- oxygen concentration important in vegetable, XIV, 913
- papaw, *see* Papaw
- peach, *see* Peach

SUBJECT INDEX

Storage (*continued*)—

- pear, *see* Pear
 pests, **XI**, 647; **XII**, 1539; **XIII**, 635, 1368, 1570, 1571; **XIV**, 1188, 1392; **XV**, 1325, 2010
 plum, *see* Plum
 potato, *see* Potato
 prune, **XIV**, (379)
 publications in 1942, a survey of, **XIV**, 1384
 in the Punjab, **XII**, 1152; **XIII**, 1094
 quality affected by—
 borax top dressing, **XI**, 254
 manuring, **XV**, 483
 rootstocks, **XIV**, 905, 2019, 2025
 time of picking and orchard practice, **XV**, 72, 73
 quick freezing superior to dehydration for vitamin retention, **XV**, 943
 raspberry, frozen pack, **XI**, (291); **XII**, 673
 Research Scheme, Ganeshkind Fruit Experiment Station, Kirkee, **XI**, 615
 root crops prior to seed production, **XII**, 1109
 rose, *see* Rose
 seed, *see* Seed
 size of fruit affects loss of weight in, **XI**, 610
 soya bean, **XV**, (758), 1305
 strawberry, *see* Strawberry
 SO₂ used in, **XI**, 274, 275, (984); **XII**, 1107; **XIV**, 371
 sweet potato, *see* Sweet potato
 temperature control, **XI**, (291)
 tobacco, *see* Tobacco, stored
 tomato, *see* Tomato
 trials, Swiss, of fruit and vegetables, **XV**, 2079
 tropical fruit, **XII**, 280, 1108
 vegetable, *see* Vegetables
 vitamin C in apple affected by, **XIV**, 1939
 volatile substances, *see* emanations
 waxed paper linings for pears, **XIII**, 344
 waxing, *see* dips
 wraps—
 for apples, **XIV**, 368; **XV**, 877
 for avocado, **XIII**, 1047; **XV**, 1304
 for citrus, **XV**, 931
 for fruit, oiled, **XII**, 1530; **XIII**, 303, 344
 for oranges, **XI**, 269, 272; **XIII**, 1046
 pliofilm, **XIII**, 1047; **XIV**, 368; **XV**, 317, 877, 931
 for pears, **XII**, 1100
 Store for fruit and vegetables at St. Margrethen, Switzerland, **XII**, 1098
 Stored products, vitamins in, **XIV**, 937
 Stramonium, *see also* *Datura stramonium*—
 chemical composition, **XIV**, 1238, (1298)
 collection in S. Rhodesia, **XIV**, 224, (715)
 production in Empire, **XI**, 936
 rain affects alkaloid content, **XII**, 1411
Strasseria carophila, **XIV**, 133
 Straw—
 composting, **XIV**, 514, 515
 versus compost, **XIV**, 76
 fermentation, hop yeasts for, **XV**, 646
 Strawberry, *see also* *Fragaria*—
 aphis (*Capitophorus fragariae*), **XI**, 764, 1181, 1182; **XII**, 115, 116, 1305; **XV**, 105
 in Arctic, breeding, **XIII**, 1213
 bed renovation, **XIII**, 1216
 boron influence or deficiency, **XIV**, 99; **XV**, 1358
 breeding, **XII**, (1274); **XIII**, 796, 1213; **XV**, (526), 944, 1013, 1506

Strawberry (*continued*)—

- canning, **XIV**, 1425
 certification scheme in England, **XV**, 1012, 1505
 cold resistance in early stages of growth, **XIV**, (161)
 crinkle, **XII**, 1305; **XV**, 1564
 cultivation experiments in Arkansas, **XV**, 1509
 day length affects possibility of forcing, **XV**, 1014
 deficiency symptoms, **XIV**, 554
 deterioration, **XIII**, 410
 diseases, **XI**, 1017; **XV**, 1562, 1563
 firmness measurement, **XIV**, (534)
 forcing, **XV**, 1014
 frost protection, **XIII**, 810
 frozen pack preservation, **XV**, 1308
 fruit—
 developmental analysis, **XIII**, 1214
 set increased by naphthoxyacetic acid, **XIV**, 1553
 fumigation against *Paria canella*, **XII**, (1328)
 grafts, **XI**, 1135
 growing—
 in Canada, **XV**, 1504
 in England, **XII**, 1273; **XV**, 1503
 in Idaho, **XV**, (1535)e
 in S.E. Iowa, **XIV**, 1089
 in Massachusetts, **XII**, (833); **XV**, (1535)a
 in Missouri, **XIV**, 1087
 in North Queensland, **XIV**, 97
 in Ontario, **XV**, 1011
 in Sweden, **XV**, (526)
 in United Provinces, India, **XIV**, 1088
 growth, source of nitrogen and pH affect, **XIV**, 1554
 growth substances and, **XIII**, 775; **XIV**, 1553
 grubs (*Phyllophaga* spp.), **XI**, 81, 1186; **XII**, 872
 hardness, **XIII**, (81); **XV**, 1507
 harvesting and packing, **XV**, 849
 inheritance in, **XII**, (411)
 inoculation with *Bacterium fascians*, **XII**, 438
 iron and manganese nutrition, **XV**, 536
 irrigation, **XIV**, (1567); **XV**, 486
 the Japanese, *Fragaria inumae*, **XII**, 409
 knobby berry, **XIV**, 588; **XV**, 925
 Lanarkshire disease, *see* red core
 leaf blotch (*Phyllosticta* and *Zythia*), **XII**, 118, 1314; **XV**, 101, (1659)b
 leaf roll, **XIII**, (101)
 manuring, **XII**, 832; **XIV**, 1554, 1555; **XV**, 519
 mirid (*Calocoris norvegicus*), **XIV**, 588
 mite, *see also* *Tarsonemus pallidus*, **XIII**, 1289, 1459; **XIV**, 1610
 Nuclear Stocks Scheme in England, **XIII**, 1215
 nutrient deficiencies, **XIV**, 554
 packing, **XV**, 849
 pests, **XII**, (867); **XV**, 1562
 preservation in sulphur dioxide-calcium solution, **XIV**, 372
 purple leaf spot (*Mycosphaerella louisianae*), **XI**, 760
 red core (*Phytophthora fragariae*), **XII**, 1315; **XIII**, 796, 818; **XIV**, 135, 1141; **XV**, (596), 1033
 rhynchites (*Rhynchites germanicus*), **XI**, 1175; **XII**, 453
 root rot, cover crops and, **XI**, 1166, 1167
 root weevils, control, **XII**, 870

SUBJECT INDEX

Strawberry (*continued*)—

- runner production, XIV, 1552, (1567); XV, (83), 1505
- spacing, XI, 1136, (1137); XIII, 80, (81); XIV, (1567); XV, 1007
- storage—
 - frozen pack, XV, 1308
 - gas, XI, 972
 - precooling tests, XV, (2011)b
- stunt, XII, 115
- transpiration and root temperature, XII, 410
- varieties—
 - Burgundy, XIII, 773
 - English, XIII, 409, 410; XV, 1009
 - in Germany, XIII, 79, 1212
 - identification, XV, 518
 - Massey, XI, 60
 - Rocky Mountain, a hardy, XI, 1134
 - Southland, XV, 1508
 - Swiss, XIV, 98
 - for syrup, XV, 980
 - tests, XIII, 1212
 - in U.S.A., XIV, 533
- virus—
 - crinkle, XII, 1305; XV, 1564
 - inactivation, XV, 544
 - leaf roll, XIII, (101)
 - transmission, XII, 115, 116
 - various, XV, 1562, 1563
 - vitamin C content, XI, 61; XIII, 774
 - weather affects vitamin content, XIII, 774
 - weevil (*Anthonomus signatus*) control, XIII, 432
 - winter injury experiments, XIII, (81); XV, 1507
 - yellow edge, XI, 1160, 1518; XII, 436, 437
- Streams and furrows, gauging, XI, 1086
- Streptocarpus*, photoperiodism in, XIII, 536
- Strophanthus*—
 - gratus*, fruit setting in, XI, 964
 - spp., trials in Queensland, XI, 1521
- Strumeta tryoni*, XI, 585, 1189; XIV, 1885
- Strychnos nux-vomica*, trials in Queensland, XI, 1521
- Stumps, removal of tree, XI, 356; XIII, 37, 400, 762-764; XIV, 525
- Styrax japonica* var. *fargesii*, propagation by cuttings, XV, 51
- Styria, viticulture in, XI, 62
- Subsoils, gas percentages in orchard, XIV, 1071
- Sub-tropical—
 - agriculture, manual, XV, 1974
 - crops, bulletin on dry (Russian), XIII, 1485
 - fruits in California, XII, 573
 - research station—
 - at Soçi, XV, 1196
 - at Umtali, S. Rhodesia, XV, 2078
- Succulents, *Aloinae* in European gardens, XV, 759
- Sugar beet—
 - aphid control in greenhouse, XIII, 888
 - black root of seedling, XIII, (1363)
 - boron deficiency, XIII, 505, 887
 - climatic relations of, XIII, (131)
 - curly top virus, XV, (227)
 - extraction at home, XIII, 1080
 - flowering, photothermal induction of, XI, 103
 - growing under continuous light, XII, 481
 - growth substances and, XI, 659; XII, 343, 937, 1393; XIV, 1212
 - heart rot, XIII, 887
 - latent virus of dodder affects, XIV, 1213
 - leaf removal affects, XV, 148
 - leaves, use in human nutrition, XIV, 403

Sugar beet (*continued*)—

- noxious nitrogen in leaves and other parts, XIV, 1695
- photosynthesis, XIII, 479
- propagation by cuttings, XI, 1234
- Sclerotium* rot, XI, (1235)
- seed—
 - production, XIII, 1362
 - treatment with naphthaleneacetic acid and other substances, XII, 1393
- strains, XI, (488)
- yellows virus, XIII, (231)
- yield increased by white washing, XV, 147
- Sugar cane—
 - borer (*Diatraea saccharalis*), biological control, XI, 914
 - breeding in Barbados, XII, (659)
 - B.W.I. Central Breeding Station, Barbados, A.R. 1939/40 and 1940/41, XIII, (672)
 - climatic relations of, XIII, (131)
 - experiments in Trinidad, *see* Sugar cane in Trinidad
 - field experiment lay out, XI, (248)
 - filter press cake as manure, XIV, 257; XV, 862
 - froghopper (*Tomaspis saccharina*), XII, 1503
 - home manufacture of sugar from, XI, 310
 - Jamaica, yields, XI, (248); XII, (273)
 - leaf diagnosis, XV, 825
 - manuring, XI, 187, 1037
 - Mauritius problems, XII, 717
 - photosynthesis, XII, 1034
 - rapid reproduction methods, XII, 1033
 - refuse composting, XIII, 1009
 - research in Bombay-Deccan, XII, (659)
 - Research Station, Mauritius, A.R. 1939-1943, XI, 1037, 1517; XII, (1584); XIV, (968); XV, (946)
 - root stimulation with ethyl alcohol, XI, 186
 - trash utilization, XII, (1095); XV, 824
 - in Trinidad, field experiments, A.R., XI, (1054); XII, (273); XIII, (672); XV, (2082)^f
 - varieties—
 - in Mauritius, XI, (248), (608)
 - in Tucumán, XII, 1502
- Sugar—
 - determination in apple tissues, XIV, 402
 - formation in plants, climate affects, XV, 151
 - from Jerusalem artichoke, XIII, 333
 - maple, production in Russia, XIV, 1214
 - prune, blossom bud formation, thinning and, XI, 731
- Sugars in apple and cherry blossoms, XV, 478
- Sulphanilamide affects seed germination, XIV, 1473
- Sulphate salts in plants, XII, 1191
- Sulphates, peach response to high, XIII, 1185
- Sulphated peaches, preserves from, XIII, 1043
- Sulphiting problems of dehydrated vegetables, XV, 1325, 2037
- Sulphur—
 - content of sunflower seeds affected by sulphur deficiency, XII, 1406
 - a cure for vine diseases, XV, 119
 - deficiency—
 - in black mustard, XIII, 494
 - in citrus, XIII, 250
 - in sunflower, XI, (1092)
 - dioxide—
 - determination—
 - in dehydrated foods, XIV, 1420; XV, (2060)^a
 - in fruit juice, XII, (295)

SUBJECT INDEX

Sulphur dioxide (*continued*)—

- in food industry, use of liquid, XIV, 371, 372
- for preservation of—
 - citrus juice, XIV, 942
 - dehydrated vegetables, XIII, 1066
 - dried grapes, XII, 1129
 - fruits, XI, 274, 275, (984); XII, 687, 1107; XIII, 1042-1044; XIV, 371, 372, 1415; XV, 902
 - gooseberries, XIV, 1985
 - pineapples, XIV, 1429
- retention by dried fruit, XII, 1126, 1537
- toxicity of, XI, 376
- fungicidal action of, XII, (894)
- injury to citrus, XIII, 1483
- metabolism in plants, XII, (752)
- residues on citrus foliage, XIV, 1854
- and rose growth, XIII, (240)
- shy apple varieties, XI, 778

Sulphuric acid—

- seed treatment, XIII, 701
- for weed control, XIII, 465, 513, 864, 1399; XIV, 744, 745; XV, 1103-1105, 1765

Sulphuring, *see also* Sulphur dioxide—

- vines, XV, 119, 1583, 1586, 1587

Sulphurous acid for cherry bleaching, XIV, (1431)

Sultana, *see* Vine, grape drying

Sumatra—

- meteorology of East Coast, XI, (965)
- reserve lands, proposals for use, XII, 1499

Sunburn—

- extent affected by different sprays, XIII, 1244
- methods of preventing in fruit trees, XI, 222; XII, 433

Sundays River Research Station, work of, XV, 246

Sunflower—

- air humidity affects nutrient uptake, XII, 1408
- boron—
 - absorption by seedlings, XV, (227)
 - effects on, XIII, 497
- breeding, XII, 945; XIV, 1714; XV, 1731
- cultivation—
 - in Brazil, XV, (1185)
 - in England, XIV, 213, 700
 - in Massachusetts, XV, 1730
 - in Uruguay, XII, (587)
- cultural practice affects growth, XIII, (947); XV, 1125
- disease, *Fusarium solani* var. *minus*, XIV, (710)
- floral biology, XIV, 1714
- floral movement in, XIV, 701
- grafting (mentor) work with, XII, 762, 763
- growth and nutrition in Languedoc, XV, 1125
- iron deficiency, XV, 650
- leaf petiole structure, XIV, (1298)
- leaves and radio-active CO₂, XI, 680
- manuring, XV, 649
- metabolism, sulphur deficiency affects, XI, (1092)
- morphology and flowering in, XI, (496)
- nutrition affects growth, XIV, 1715
- as oil seed crop, XI, (496); XIV, 213, 700
- photosynthesis in, XIV, (1476)
- pigments in achene wall of, XV, (1185)
- resistance to broomrape, physiological aspects of, XIII, 495, 496; XIV, 1228, 1229
- seed—
 - grading, XV, (1853)d
 - hygroscopicity, XIV, 702

Sunflower seed (*continued*)—

- meal, nutritional value, XV, (2059)e
- from Nigeria, XV, 2053
- and oil yield, association with other characters, XIII, (947)
- respiration, XIV, 703
- soil temperature affects nutrient uptake, XII, 1407
- stems, response to growth substances, XI, (1067)
- sulphur deficiency effects, XII, 1406
- varieties, XV, 1728
- vegetative hybridization, XV, 1732
- vernalization, XII, 1405
- for wilting tests of different soil moistures, XV, 1729
- Sunlight effect on vitamins, XIV, 1329
- Sunn hemp (*Crotalaria juncea*)—
 - cultivation—
 - in India, XIV, 1211
 - in S. Rhodesia, XIV, 1210; XV, 630, 1360
 - fibre extraction, XV, 1715
 - for green manuring, selection, XI, 910
 - a wilt disease (*Fusarium moniliforme* var. *subglutinans*), XV, 631
- Sunscauld on fruits, *see also* Sunburn, XIII, 92, 1243; XIV, 1578; XV, 91, 95
- Supercooling tests in selection of frost-resistant beans, XIV, 796
- Superphosphate—
 - picric acid in, effect on beans and tomato, XV, 206
 - time of application, XII, 1361
- Surgery, tree, *see* Tree surgery
- Swanley College, amalgamation with Wye College, XV, 947
- Swede—
 - brown heart, XII, 161
 - clubroot (*Plasmodiophora brassicae*), XIV, 235
 - growth inhibited by growth substances, XIV, 1533
 - juice concentrate, XII, 1118
 - varieties, XI, 104
- Sweden—
 - cherry growing, XV, 445
- fruit—
 - crops in, XIV, 1037-1039; XV, 437
 - growing progress, XIV, 460, 509
 - packing and marketing, XIV, 91
 - trees and soft fruits in, XV, (505)
- horticultural research in, XIII, 707
- imports of apples and pears, XV, (505)
- nursery supervision in, XIII, 376; XV, 459
- plant diseases 1933-1937, XI, 745

Swedish Pomology, a, XIV, 471

Sweet corn—

- growing in England, XV, 753
- irrigation, XIII, (219)
- John Innes hybrid, XIII, 665; XV, 1184
- varieties—
 - for dehydration, XIV, 1666
 - for England, XII, 712

Sweet pea—

- nutrition, XI, 824
- teleomorphic effects of 4-chlorophenoxyacetic acid, XIV, (1816)

Sweet potato—

- carotene content, XIII, 262, (1500)
- curing and storing, XIII, 311; XIV, 915
- digging, XIV, (1875)
- diseases, XII, 1485; XV, 816
- as emergency crop in India, XV, 264

SUBJECT INDEX

- Sweet potato (*continued*)—
 ethanol production from, XV, (1336)
 fertilizers and manures, XI, 163; XV, 1902, 2072
 fungicides for, XV, 1905
 growing—
 in Alabama, XV, 803
 in Illinois, XV, 265
 in Iowa, XI, 1230; XV, 1902
 in New Guinea, XI, 552
 in N. Jersey, XIII, 261
 in Palestine, XI, 112
 in Queensland, XIV, 318
 in Rhodesia, XIV, 1856
 in S. Africa, XII, 221
 in Shantung, XII, 1011
 in Tennessee, XV, 266
 harvesting, XII, 569
 irrigation, XII, 570
 low temperature effects on, XIV, 1859
 nematode (*Heterodera marioni*), XII, 571
 pests, XIV, 1855
 post harvest handling, XIV, 377
 pox (*Actinomyces ipomoea*), XII, 1484
 scurf control, XIII, 985
 seed management, XIV, 1331; XV, 1905
 soft rot (*Rhizopus nigricans*), XIV, 1860
 spacing, XIV, 1858
 storage, XIII, 311, 632; XIV, 1391; XV, 1903, 1904, 2009
 variability trials, XIV, 1857
 varieties—
 canning, XV, 1230
 for dehydration, XIV, 1666
 trials at Trinidad, XIV, 1855
 virus disease of, XV, 267
 vitamin A content, XI, 163
 vitamin C in, XIV, 1966
 weevil (*Cylas formicarius elegantulus*), XIV, 859
 wilt, Spergon dipping for, XIII, 984
 Swiss market, fruit and dried fruit found on, XI, (984)
 Switzerland—
 agricultural economics, XII, 729
 fruitgrowing in, XI, 1094; XIV, 1032, 1035, 1036; XV, 38, 1410-1413
 Sword-bean *see also Canavalia*—
 Sword-bean (*Canavalia gladiata*), food value, XIV, 1424
Sylvilagus floridanus mearnsii, XII, 129
 Symbioses, plant, manual, XV, (432)
Symphoricarpos racemosus germination, XIII, 537
Synchytrium endobioticum, resistance of potato to, XII, 1301
 Syrup—
 apple, a bland, XIII, 315
 black currant, XIII, 1078
 blended fruit, XI, 995
 fruit, frozen packed, XV, 898
 from table beet, XIII, 1079
 Systematics, bearing of chromosome numbers on, XV, 2065

Tabernanthe iboga cultivation, XV, 843
Tachyporus obtusus preying on strawberry aphid, XV, 105
 Tadzik branch of Academy of Sciences, U.S.S.R., Botanical Section, XV, 55
 Tadzikistan, flora and vegetation of, XV, (34), 55
Taeniothrips simplex, *see* Gladiolus thrips

 Tafo, Gold Coast, Cocoa Research Station—
 purpose and work, XI, 209, 1514
 Report 1938-1942, XIV, 2021
Tagetes erecta flowers contain bactericidal substances, XIV, 1638
 Tamarind seed pectin, XV, (2059)v
 Tanganyika—
 Dep. Agric. A.R. 1939-1943, XI, (1054); XII, (1584); XIII, (1638); XIV, (2030)
 Dep. Agric. A.R. Specialist and research work 1943, XV, 389
 plant diseases in, XIV, 1884
 Tangelo—
 characteristics, XIII, 959
 the Pearl, XI, 140
 rootstocks for, XI, 847
 Tangerine—
 juice products, XIV, 941
 topworking lemons on, XI, 858
 wraps for, XI, 269
 Tank, constant temperature, XV, 953
 Tankan citrus species (*C. tankan*), XIV, 1315
 Tannin(s)—
 in banana, XV, 860
 in cacao, XI, 565; XIV, 398; XV, (361)
 determination, XIV, 1006
 as control for virus, XI, 1369
 from grapes, XIV, 397
 plants—
 of *Anacardiaceae*, XV, 191
 from Belgian Congo, XIV, (2003)
 Bergenia spp., XI, 491
 betel nut, XII, 692
 of Brazil, composition, XV, (758)
 Caesalpinia coriaria, XIII, 1531
 Cotinus coggygria, XV, 191
 in East Africa, XI, 1397
 hottentot fig (*Mesembryanthemum edule*), XIV, 1717
 Libidibia coriaria, XII, 1016
 Polygonum species, XV, 171, 1850
 of Rumania, XIII, 903
 Rumex thyrsiflorus, XV, 172
 in U.S.S.R., XIV, 974, 975, 1297; XV, 654
 willow, XIV, 974, 1297; XV, 170
 Tanning, *see* Tannin
 Taphrina—
 cerasi, growth substance produced by, XI, 1170
 deformans, *see* Peach leaf curl
 pruni, XIV, 1140
Taraktogenus kurzii, *see* Chaulmoogra
Taraxacum kok-saghyz, *see* Kok saghyz
Taraxacum megalorrhizon, *see* Krym saghyz
 Taro—*see also* *Colocasia esculenta*—
 diseases, XII, 244
 in New Guinea, XI, 552
 processing and use of products, XII, 303
Tarsonemus—
 bakeri on citrus, XII, 1472
 fragariae, XII, 1162
 laticeps, XII, 544
 pallidus, XIII, 1289, 1459; XIV, 1610, (1662)
 Tartrates—
 from fruits, extraction, XIV, 927
 recovery from grape wastes, XIV, (945)
 research on, XIII, (1087)
 Tau saghyz (*Scorzonera tau-saghyz*)—
 cultivation, XIII, 1378; XIV, 2029; XV, 676
 dormancy elimination, XIV, 1240
 investigations in Australia, XV, 369
 origin of, XIII, 1384

SUBJECT INDEX

Tau saghyz (*continued*)—

- seedlings and pH of medium, XV, 189
- seeds, environment and, XII, (1419)
- vegetative propagation, XV, 186, 188

Taxus, growth substances and, XI, 337, 1057

Te Kauwhata Horticultural Research Station, N.Z., XV, 383

Tea—

- anatomy, XII, 1037; XIII, 274
- ash content, XII, 616
- Association, Indian, sci. Dep., A.R.s 1939, 1941, 1942 and 1940, XI, 1029; XIII, 343; XIV, 419; XV, 1351
- bagworms, XV, 829
- buddings, development of, XII, 1505
- caffeine determination, XII, 1141
- canker, branch, XI, 1378
- chemical composition, XV, (1336)
- China, growing in Misiones, XIV, 338
- clones, XI, 557, 918
- cover crops for, XIII, 343
- cultivation *versus* weeds, XI, 193, 194; XII, (273)
- cuttings, XI, 919, 1029, 1374, 1375, 1513; XII, 615, 1574; XIII, 273
- deficiency symptoms, XI, 195, 921, 1377; XIII, 1513
- diseases, XV, 929
- drought resistance in, XIV, 1120
- extraction from prunings, XV, 910
- fermentation processes, XI, (248), (641), 1011, (1012); XII, (708), (1142); XIII, 1085, 1615, (1620); XIV, (1431)
- field trials, XI, 918
- flush shoots, XIII, 274
- flushing behaviour, XV, 1246
- food and drug regulations concerning, XII, 616
- grafting, XI, 192; XII, 1504
- green manuring, XIII, 343; XV, 929
- growth and anatomy, XIII, 274
- growth substances for cuttings, XI, 919, 1374, 1513; XII, 615, 1574
- Helopeltis* control, XII, (618)
- intercropping with Indian corn, XV, 1934
- leaves for rabbits, XII, 1558
- manufacture, *see also* fermentation, XI, (1506)
- manuring—
 - in Ceylon, XI, 923; XIII, 590; XIV, 955, 1890; XV, 277, 929, 1932
 - in India, XI, 558; XIII, 343; XIV, 339
 - in Java, XI, 1376
 - nitrogenous, XI, 922, 923; XV, 277
 - in Nyasaland, XV, 2076
 - phosphoric, XI, 922
 - and weeds, XV, 1932
 - of young, XI, 558
- oxidase system, XIII, 1615; XIV, 399
- pests, XII, 1574; XV, 929
- phloem—
 - necrosis virus, XIV, 876, 955, 956; XV, 828, 929
 - studies, analysis of flushing behaviour, XV, 1246
- planting—
 - in Assam, report for years 1940 and 1942, XII, (1584); XV, 276
 - in India—
 - A.R. United Planters Ass. Southern India 1942/3 and 1943/44, XV, 390
 - notes on, XI, 1373

Tea planting (*continued*)—

- in Malaya, XI, 1371
- in Peru, XIV, 337
- plucking, XIII, 1511; XIV, 956
- propagation methods, *see also* cuttings and vegetative propagation, XIII, 273
- pruning, XI, 1029; XIII, 343, 1512; XIV, 1889; XV, 2076
- prunings, getting a concentrated tea extract from, XV, 910
- red rust (*Cephaleuros parasiticus*), XIII, 275
- replanting *versus* supplying, XV, 1933
- Research Institute of Ceylon, A.R. 1940-1943, XI, 1513; XII, 1574; XIV, 956; XV, 929
- research at Toklai, *see* Tea Association, Indian
- research at West Java Research Station, XII, 251, 619
- root disease, (*Fomes noxius*), XIV, 956
- seed spacing, XV, 2076
- selection—
 - in Assam, XIII, 273
 - for drought-resistance, XI, 917
 - in Java, XI, 1372
 - in Kotmale, Ceylon, XIV, (1932)
 - in Nyasaland, XV, 2076
 - for vegetative propagation, XII, 614
- shade and shading, XIII, 343, 592; XV, 1247
- shot-hole borer (*Xyleborus* sp.), XI, (1379); XII, 1036; XIII, 591, 1514; XIV, 877, 1890; XV, 278, 1935
- soil acidity effect, XIV, 1344
- soils and root knot eelworm, XV, 279
- spacing, XI, 920
- substitutes in Germany, XIV, 208
- sunscorch, XIII, 343
- tannin estimation, XI, (248)
- tipping, XIII, 1511
- tissue blackening after death, XI, 1501
- tortrix control (*Homona coffearae*), XII, 617
- tree oils, Australian, XV, 168
- vegetative propagation, XI, 192, 557, 918, 919, 1029, 1374, 1375, 1513; XII, 614, 615, 1504, 1505, 1574; XIII, 273
- virus, *see* phloem necrosis
- vitamin C in, XI, 196, 559
- weeds and weeding, XIV, 1891; XV, 929, 1932
- Teasel (*Dipsacus fullonum*)—
 - growing in Punjab, XIV, 332
 - in Lithuania, XII, 1368
- Technical Communications of the Imperial Bureau of Horticulture and Plantation Crops, Nos. 14-16, XIV, 967; XV, 2080, 2081
- Technical report of the West African Commission, XIV, 1442
- Tejpat (*Cinnamomum* spp.), XV, 1287
- Telfairea pedata, XI, 590
- Telome theory and origin of stamen, XIV, 15
- Temperature—
 - affects—
 - Californian annuals, XV, (432)
 - florists' crops, XIV, 1301
 - flower formation, XI, 1070, (1300)
 - groundnut growth, XII, 1284
 - hemp growth, XIV, 1690
 - kok saghyz, XIV, 227
 - onions, XIV, 737
 - Rudbeckia* sp., XI, 358, (380)
 - seedling growth, XII, 1181
 - soya bean, XI, (380); XIII, (1454)
 - vegetable growth, XI, 93; XIII, 856

SUBJECT INDEX

- Temperature (*continued*)—
 conditions in plantations, **XII**, (791)
 control methods, **XI**, (1073)
 and evaporation relations, **XIV**, (19)
 and photoperiod relations, cabinets for
 studying, **XIV**, (19)
- Tensiometer soil moisture tests, **XII**, 210; **XIII**, (375)
- Tenthecoris bicolor* control, **XV**, 819
- Tenuipalpus* mite species on citrus and other plants,
XIV, 591, 845, 851
- Tephrosia*—
candida, a shade tree for coffee, **XV**, 284
 spp. in Russia, **XIV**, 1661; **XV**, 123
virginiana, rotenone content, **XII**, 1343, 1344;
XIV, (635); **XV**, 1363
vogelii, introduction to U.S.S.R., **XV**, 123
- Tephrosin separation process, **XIII**, (578)
- Termite(s)—
 damage prevention and control, **XIV**, 1614
 ecological relationships of plants to, **XIII**,
 (115)
 in Java, **XII**, 1028
 wood preservatives against, **XIV**, 868
- Terracing to check soil erosion, **XV**, 1482, 1483
- Tetrachloro-para-benzoquinone stimulation of pea
 seed, **XIII**, 228
- Tetrachoric correlation for horticultural research,
XIII, (31)
- Tetrahydrofurfural butyrate, a growth substance,
XI, (347)
- Tetranychus*—
pacificus, **XI**, 1176; **XII**, 128, 448, 1324;
XIII, 1287; **XIV**, 589
schoenei, **XV**, (1658)h
 sp., new, on prune, **XIV**, 1610
telarius, see also Red spider, **XI**, (1177),
 (1300); **XII**, 1397; **XIII**, 1286, 1345;
XIV, 590; **XV**, 373, 568, 1598
- Tetraploid—
 apples, see Apple
 fruit behaviour, **XIV**, 486, 487
 types in *Ribes*, **XV**, 512
- Tetrapyrrolic compounds in plants, **XIV**, (458)
- Texas—
 agric. Exp. Stat.—
 abstracts of bulletins 1940 and 1941, **XII**,
 (337), (1584)
 A.R. 1939-1943, **XI**, 1049; **XII**, 334; **XIII**,
 (347); **XV**, 1363
 plant diseases in, **XI**, 746
 vegetable growing, **XI**, 445
- Thamnotettix argentata* vector of yellow dwarf of
 tobacco, **XII**, 940; **XV**, 369
- Theobroma* spp., see Cacao
- Thermoperiodicity in tomato, **XIV**, 1763
- Thermostat, Wädenswil automatic, **XII**, 768
- Thersilochus nigricans* a parasite of cabbage stem
 weevil, **XIV**, 753
- Thevetia nereifolia* as insecticidal plant, **XIII**, 127
- Thiamin, see also Vitamin B₁—
 in crown gall, **XIV**, (1131)
 in peas, **XIV**, (2003)
 sources, **XV**, 1329
- Thielavia basicola*, **XIII**, 254
- Thielaviopsis* spp. in tobacco and resistance thereto,
XII, 191; **XIV**, 1699
- Thinning—
 apples, see Apple
 apricots, **XV**, 1468
 deciduous fruit trees, **XI**, 1125; **XII**, 71, 1261;
XV, 65
 loquats, **XI**, 734; **XIV**, 84
- Thinning (*continued*)—
 oranges, **XI**, 854
 peach, see Peach
 pears, **XI**, 733
 by sprays, see Fruit set, spraying
 sugar prunes, **XI**, 731
 trees in orchard, **XV**, 504
- Thiocyanate spray to increase fruit colour in
 apples, **XIV**, 521
- Thiosan for sweet potato scurf control, **XIII**, 985
- Thiurea—
 as growth substance, **XIII**, 518; **XIV**, 775;
XV, 421, 636
 and orange storage rots, **XV**, 874
 as protective agent for vitamin C, **XIV**, 920
 for seed dormancy breaking, **XIV**, 762
- Thlaspi arvense*, source—
 of seed oil, **XIV**, 705
 of vitamin C, **XIV**, 1236
- Thomasianina theobaldi*, **XIV**, 586; **XV**, 107
- Thresher—
 a miniature, **XIII**, 138
 a single plant, **XIV**, (641)
- Threshing root and vegetable seed crops, **XV**,
 1673
- Thrips*—
angusticeps pest of oil crops, **XV**, 167
 banana rust, **XI**, 605
 cacao, see Cacao
 citrus, see Citrus
 as disease vectors, **XIII**, 210, 1029; **XIV**, 1280
 the greenhouse (*Hercinothrips femoralis*),
 hosts of the, **XIII**, 1344
 on onion, see Onion
 prune, **XI**, 429
 tartar emetic—
 for control, **XI**, 528, 869; **XIII**, 1455;
XIV, 852, 1737
 substitutes for, **XIV**, (297)
 tobacco (*Frankliniella fusca*), **XIII**, 486
- Thysanoptera* on flax, **XIV**, (200)
- Tigridia pavonia* cultivation in Russia, **XIV**, 1806
- Tin determination in canned food, **XV**, (1336)
- Tingo Maria Experiment Station, Peru, **XIII**, 1003,
 1501
- Tipuana speciosa* shade for coffee, **XIV**, 1895
- Tissues, manual on plant, **XIV**, 414
- Titanium increases virulence in crown gall, **XIV**,
 (635)
- Toad, the giant (*Bufo marinus*), **XI**, 182, 552
- Tobacco, see also *Nicotiana tabacum*—
 alkaloid anabasine in grafted, **XIV**, (691);
XV, 155
 alkaloids, **XIII**, 140, 141, 1364, (1369);
XIV, (691), (1803); **XV**, 155
 anthracnose, **XV**, (596)
 ants, **XIII**, 485; **XV**, 644
 arsenic content of Argentine produced, **XV**,
 642
 Australian work, **XIII**, 1630
 bacterial infection, **XIII**, (231)
 bacterial wilt, **XIII**, 483; **XIV**, 688
 black ant control, **XIII**, 485
 blackfire, **XII**, (532)
 black shank (*Phytophthora* spp.), resistance
 in *Nicotiana* to, **XIII**, 890
 blue mould, see downy mildew
 broomrape attacking, **XIII**, (1369)
 cercospora leaf spot (*Cercospora nicotianae*),
 see frog eye
 chemical classification, **XI**, (501); **XIII**, 1364
 cigar leaf, manuring, **XIII**, 1365

SUBJECT INDEX

Tobacco (*continued*)—

- cigarette—
 - beetle, carriers affect, **XIII**, 1368
 - cultivation, **XI**, (965)
 - harvesting, curing and grading, **XI**, (1370)
 - potassium in, **XI**, (1287)
- classification—
 - of Australian-grown, **XIV**, 1217
 - by nature of alkaloids, **XIII**, 1364; **XIV**, 1697
- climate and, **XIII**, (131)
- cryolite injury to seedlings, **XIII**, 1366
- cultivation practices, **XIV**, 683
- curing, **XII**, (532), 694, (695), (1095); **XIV**, (945); **XV**, 355, 634, 635, (758)
- curly top, **XI**, (1287); **XIII**, 1367; **XV**, 208
- deficiency diagnosis, **XV**, 1685
- disease control by crop rotation, **XV**, 643
- downy mildew (*Peronospora tabacina*), **XI**, 130, 1285, 1286; **XIII**, 892, (893); **XV**, 1122
- eelworm, **XII**, 193; **XIII**, 588; **XV**, 689
- etch virus vectors, **XI**, 1284
- excised roots, nicotine synthesis in, **XIII**, 481
- Experiment Station, Medan, the Deli, **XIII**, 588
- fermentation, *see* curing
- flea beetles (*Epitrix* spp.), **XIV**, 1705, 1706
- frog eye (*Cercospora nicotianae*), **XI**, 191, 916; **XIII**, 588, 891
- fumigation, **XIII**, 1369
- grafted on *N. glauca*, **XIV**, (691)
- green June beetle (*Cotinis nitida*), **XV**, (758)
- growing, *see also* industry—
 - in British Empire, **XIV**, 1215
 - in Broye Valley of Switzerland, **XIV**, 1696
 - cigarette, **XI**, (965)
 - in Colombia, **XIII**, (1553)
 - in Guatemala, Virginian, **XV**, 1716
 - in Kenya, **XV**, 634
 - in New Zealand, **XV**, 383
 - in south-west of U.S.A., **XV**, (431)
 - in S. Rhodesia, **XI**, 497; **XII**, 190; **XV**, 152, 633
 - in W. Australia, field trials, **XI**, (1287)
- growth substances and, **XII**, 939; **XV**, 636
- hornworm moths, **XIV**, 690
- industry—
 - in Nyasaland, **XV**, (1185)
 - in S. Rhodesia, **XV**, 2078
- influenced by preceding crops, **XI**, 553
- krommek virus, **XIII**, 484; **XIV**, 1701
- leaf—
 - curl, **XII**, (194), 613, (1095); **XV**, 275
 - nicotine determination in, **XI**, 499
 - spot bacteria, perpetuation on other plants, **XIV**, 1219
 - water soaking, deleterious effects of, **XIV**, 1220
- Limonia agonus* control on, **XIV**, 207
- manuring and green manuring, **XII**, 191, 192, (982); **XIII**, (589), 986, 1182, 1365; **XIV**, 1700; **XV**, 274
- marmor tabaci* var. *vulgare*, **XI**, (501)
- mosaic, **XI**, 554, 820, (1287); **XII**, 192, (194), 531, (532), (982), 1394; **XIII**, (231), (487), (893); **XIV**, 686, 687, (691), (793); **XV**, 157, (227), (758), 935, 1717
- moth, carriers affect spread of, **XIII**, 1368
- necrosis, CO₂ diminishes bean susceptibility to, **XV**, 219
- nematodes (*Heterodera marioni*) in seed bed, **XIII**, 588

Tobacco (*continued*)—

- nicotine—
 - and nornicotine determination, **XIII**, (1369); **XIV**, (1803)
 - extraction, **XIV**, 400
 - in plants grafted on, **XIII**, 482; **XV**, 154
 - synthesis in excised, **XIII**, 481
- nutrition, *see* manuring
- and other species of *Nicotiana*, **XIII**, (1369)
- pests, **XI**, 556, (608); **XII**, (982); **XIII**, 588
- phenols in, determination of volatile, **XIV**, 2001
- physiological—
 - breakdown in maturing, **XV**, (1853)g
 - ontogeny in, **XI**, 498; **XV**, 637
 - studies with, **XII**, 938
- plantago virus in Burley, **XIII**, (893)
- potassium affects quality in, **XIII**, 1182
- preceding crop affects, **XIII**, 1365
- production in S. Africa, **XV**, 1362
- quality affected by picking lower leaves, **XIV**, 683
- research—
 - in Australia, **XII**, 1146, 1147
 - in Canada, **XII**, 189
 - in Mauritius, **XIV**, 1444
 - in New Zealand, **XI**, 1518; **XIII**, 344, 1633; **XIV**, 954, 2025; **XV**, 2075
- respiration, **XII**, (982); **XIII**, (487)
- ring spot virus, **XIV**, (1298)
- root growth, **XI**, 500
- rosette disease, **XV**, 545
- seed—
 - deterioration, **XV**, 1121
 - germination, **XV**, 639
 - harvesting and other ants, **XV**, 644
 - production, **XIV**, 1188, 1698; **XV**, (598), 638, 640, 641, 644
 - storage, **XIV**, 1216
- slime disease (*Pseudomonas solanacearum*), **XI**, 555; **XIII**, 588
- soil—
 - organic matter and flue-cured, **XII**, (982)
 - in S. Africa, **XI**, 127
 - survey in Sumatra, **XIII**, 588
- stored, pests of, **XII**, 1539; **XIII**, 1368; **XIV**, 954
- streak virus, **XIII**, 889
- Thamnotettix argentata* a virus vector, **XII**, 940; **XV**, 369
- Thielaviopsis*-resistant, **XIV**, 1699
- thrips (*Frankliniella fusca*), **XIII**, 486
- tissue cultures, **XIV**, 1218
- tomato grafts, **XII**, 176, (513); **XV**, 154, 155
- transplanting, **XIV**, 205
- Turkish, cultivation in S. Rhodesia, **XIII**, (231)
- varieties—
 - chlorophyll and carotene content, **XV**, (758)
 - in N. Carolina, **XIV**, 1699
 - resistant to black root rot, **XV**, (1852)y
 - in Wisconsin, **XII**, (532)
- vegetable weevil (*Listroderes obliquus*), **XIV**, 1707
- viruses, **XI**, 128, 129, 501, 554, 820, (821), 1284, (1287), 1368, 1369; **XII**, 192, (194), 531, (532), 613, 940, 982, (1095), 1394, (1454); **XIII**, (231), 484, (487), 889, (893); **XIV**, 206, 686, 687, (691), (793), (1298), 1701-1703, (1803); **XV**, 157, 209, (227), 275, 369, 545, (758), 935, 1717

SUBJECT INDEX

Tobacco (*continued*)—

- wastes, utilization in agriculture, XV, 153, 645
- wildfire disease, XIV, 1704
- wireworm injury, XII, (532)
- yellow dwarf, XII, 940

Toklai, *see* Indian Tea Association*Tomaspis saccharina*, XII, 1503

Tomato—

- acid content, soil moisture and, XI, 119
- alkaline injury neutralized, XII, 510
- Alternaria solani* in, XII, 975; XIII, 214, (219); XIV, 265, (268), 787, 1777; XV, 214, (598), (758), 1172, 1816
- anthracnose, XIV, (547); XV, (598), 739
- artificial-neon-lighting, XV, 717
- auxin extraction from fruit of, XV, 1812
- auxinic activity in presence of l-tryptophane, XIV, (458)
- bacterial—
 - cankers, various, XIII, 526; XIV, 785, 786, 1775
 - soft rot, XIII, 1434; XV, (758)
 - wilt, XIII, 1435; XV, 210
- a basal rot, XIV, 1776
- big bud virus, XI, 482; XIII, 1433; XV, 731
- blight, *see also* Tomato *Phytophthora*, XII, 978; XIII, 936, 937, 1439; XIV, (547), 1779; XV, (598), 732, 1171, 1820, 1821, 1825
- blood and bone manuring, XIV, 780
- blossom end rot, XII, 974, 977; XV, 728, 1823
- boron—
 - affects composition of leaflets in, XIV, 1770
 - deficiency and ascorbic acid content, XIV, 1272
 - requirements, XV, 723
- breeding, XI, 474; XIII, 216, (219), 1096; XIV, 770-772; XV, 735, 1165
- broomrape parasitizing, XIII, 938
- buckeye rot (*Phytophthora* spp.), XI, (1266)
- bush type, XV, 203, 713, 1165
- canker (*Didymella lycopersici*), *see* stem rot
- canning, XI, (1506); XII, (708); XIII, 332; XIV, 938; XV, 352
- cardboard containers for growing, XI, 1024
- carotene and lycopene in, XIV, 1960
- chlorosis, XIII, 209, 1429
- Cladosporium* diseases, *see* leaf mould
- "cloud" disease, XIII, 1092; XV, 2075
- collar rot, *see* Tomato *Alternaria solani*
- composition, climate affects, XI, 1252
- copper—
 - deficiency, XIV, 782
 - fungicides for, XV, 1820, 1823, 1825
- crossing with Chilean tomato, XIV, (268)
- crown gall, XII, 173, 174, (1440)
- curly top, XIV, 1278; XV, 208
- cuttings, effect of growth substances on, XIII, 203
- damping off (*Pythium* and *Rhizoctonia*), XIII, 935; XV, 1696
- deficiency symptoms, XI, 480; XIII, 1420; XIV, 1771; XV, 1169, 1815
- defoliation—
 - control, XV, (598)
 - disease (*Alternaria solani*), XII, 975
 - resulting from gaseous emanations, XIII, 932
- dehydration, XIV, 381; XV, 343
- Didymella*, *see* stem rot

Tomato (*continued*)—

- diseases—
 - affected by nutrition, XII, 974, 977; XV, 728, 729
 - various, XI, 813, 1249, (1266); XIII, (219), 860; XIV, 1774; XV, 726, 1816, (1853)e
- dwarf, *see* bush
- embryo culture, XIV, (1803)
- environment affects growth and transpiration, XI, 1258, 1259
- enzyme activity affected by nutrients, XIV, 1276
- epinasty denotes *Fusarium* wilt, XI, 815
- ethylene treatment of plant, XIV, 259
- evolution of cultivated, XIII, 199
- field plot technique, XIII, (1445)
- flavour in, XV, 205
- flea beetle (*Epitrix cucumeris*) control, XIV, 790
- foot rot (*Phytophthora cryptogaea*), XI, 1265
- freckle (*Alternaria* spp.), *see also* Tomato *Alternaria solani*, XIV, 1777
- fruit—
 - blemish of outdoor, XIII, 1428
 - composition, nutrition affects, XIII, 1419
 - enzyme activity in, XIV, 1274
- rot(s)—
 - (*Colletotrichum capsici*), XV, 648
 - (*Phytophthora capsici*), XV, 375, 733, 734
 - storage, XV, 1823
- set increased by growth substances, XIV, 1762
- size inheritance, XI, (1266)
- spot, storage, XV, 1306
- worm, *see* Tomato, *Heliothis armigera*
- fumigation—
 - with HCN injures potash-deficient, XV, 1168
 - with methyl bromide, XV, 743
 - possible effect on growth and vitamin C content, XIII, 522
- fungicides affect transpiration, XI, 1259
- Fusarium*—
 - infection, *see* wilt
 - germination inhibitors in, XIII, 689
- grafting, XI, 1253, 1254; XII, 176, (513), 971, (1195); XIII, 215, (219); XIV, 1761
- gray wall, XIII, 210
- green—
 - salting of, XI, 309
 - utilization of, XIV, 1997
 - vitamin C content, XIII, 331
- growing—
 - in Algeria, XV, 1162
 - cardboard containers for, XI, 1024
 - in cucumber houses, XV, 373
 - in England—
 - out of doors, XII, 505, 506, (982); XIII, 925; XIV, 774, 1270, 1758; XV, 373, 714, 1160, 1798, 1799
 - under glass, XI, 1249; XII, 1357; XIV, 773, 2014; XV, 373, 1160
 - on the farm of I.C.T.A., Trinidad, XIII, 297
 - under irrigation, XV, 1803
 - in Kansas, XIV, 258
 - in the Lower Danube Valley, XII, (513)
 - manual for England, XIV, 2014
 - in Massachusetts, XV, 1801
 - in Michigan, XIII, 926

SUBJECT INDEX

- Tomato growing (*continued*)—
 in Oklahoma, XV, 204
 in Queensland, XI, 1250; XV, 1161, 1803
 in Tasmania, XV, 1800
 in Western Australia, varieties for, XV, 1802
 in Western U.S., varieties for, XI, 116
- growth—
 dry weight changes during, XV, 1166
- substances—
 and growth in general, XI, 339, 659, 787;
 XII, 171, 172, 345, 1433; XIII, 203,
 673, 693, (697), 775, 1425; XIV, 259,
 775, 1762; XV, 422, 721, 722, (1406)j
 parthenocarpny induced by, XI, 475;
 XII, 175; XIII, 202, 775, 1425; XIV,
 1762; XV, 721, 722, 937, 1809-1811,
 2024
 temperature affects, XIV, 1763
 hardness, increasing, XI, 1257
Heliopsis armigera damage, XIII, 1443;
 XIV, 791
 heterosis in, XI, (488)
 hornworm control (*Protoparce* spp.), XIV,
 1782
- hybrid—
 seed, XIV, (1803)
 vigour, *see also* heterosis, XI, (131); XIII,
 200, 1416; XV, 1163, (1852)v
- inheritance in, XIV, 960
- interplanting to increase yield, XIV, 261
- investigations at Cawthron, XIII, 1092;
 XIV, 954; XV, 372, 2075
- iron deficiency in, XV, 1169
- irrigation, XIII, (219), XIV, (268); XV, 1807
- juice—
 manufacture, XV, 351
 quality of canned, XIV, 1992
 from tomato paste, XIII, 1081
 vitamin B₁ content, XIII, 294; XV, 1320
- ketchup, XI, 637
- leaf—
 curl, physiological, XV, 1818
 curl transmissible by grafting, XV, 1824
 diagnosis, XI, 477
 disease experiments, XIV, 263
 diseases in Palestine, XV, 1175
 spot and stem canker of seedlings (*Alternaria solani*), XIII, 214
 miner (*Phytomyza solani*), XIII, 1444
 mould (*Cladosporium* spp.), XII, 169, 170,
 1301, 1575; XIII, 212, (219), 662, 1440;
 XIV, 2025; XV, 735, 736, 944, 1175
 roll symptoms, XII, 976
 spot, *Septoria*, XI, 481; XV, 737
- light intensity possibly causes gray wall,
 XIII, 210
- lightning injury to, XII, 511
- magnesium deficiency, XIV, 1771; XV, 1815
- malformation of trusses, XIV, 781
- manganese deficiency, XI, 480
- manurial needs, tissue tests to establish, XV,
 1167
- manuring, *see also* nutrition, XI, 118, 477,
 479; XII, 179, (513), 974; XIII, 665, 1339,
 1340, 1419; XIV, 257, 262, 780, 1764-1771,
 (1803); XV, 206, 373, 724, 862, 1814
- micro-element deficiencies affect growth and
 vitamin C content, XIII, 1420
- mites (*Phyllocoptes* spp.), XIV, 792; XV, 740
- molybdenum injury, XII, 1436
- mosaics, XI, 814; XII, 1437; XIII, 1431;
 XIV, 783, (793); XV, 373, 1992
- Tomato (*continued*)—
 necrosis, XI, 1263
 nematodes and control, XI, 1264; XII, (513);
 XIII, 216, 217; XV, 373, 741, 1773
- nitrogen—
 for growth of, XII, (513)
 metabolism and manuring, XV, 724
- nutrient—
 root media without effect on storage
 quality, XIII, 1423
 solution, response to, XI, 1260
- nutrition, *see also* manuring—
 effect of macronutrient supplies on, XIV,
 1275, 1765, 1766
 under irrigation, XIV, (268)
 phosphorus, XI, 478; XIV, (1803)
 potassic, XIV, 1768
- organic matter for, XIII, (219)
 origin of, XIV, 1186, 1663; XV, 1159
- osmotic values, XIV, 441
- packing and marketing, XI, (131)
- parthenocarpic, nutritional value, XV, 2024
- parthenocarpny induced in, *see* growth sub-
 stances
- paste as source of juice, XIII, 1081
- pests, XI, 1249; XII, 1092
- phosphatic manuring, XIV, 262, 1767, 1769,
 (1803)
- phosphorus absorption, radioactive phos-
 phorus as indicator of, XI, 478
- phyllody, XI, (821)
- Phytophthora* diseases, *see also* blight, XI,
 (1266); XII, (180), 978; XIII, 936, 937,
 1438, 1439; XIV, (547), 1779; XV, 373
- picking machines, XII, 509
- picric acid in superphosphate affects, XV, 206
- pigments, study of effect of external factors on,
 XII, (513)
- pin worm (*Keiferia lycopersicella*), XIV, 267,
 1781
- platinum chloride effect on, XIII, 208
- Polia oleracea* attack, XIV, 266
- pollen germination, boron and, XII, 1434
- pollination, cross, XII, 1428; XIII, (1445);
 XIV, 960
- potash nutrition, XIV, 1768
- potato grafts, *see* grafting
- and potato nematode, susceptibility to, XII,
 (513)
- preservation, home, recipes for, XV, (2059)x
- pricking out, optimum times for, XIV, 960
- products—
 copper content, XI, 1477
 solids estimation, XI, 1476
- psyllid (*Paratrioza cockerelli*) and control,
 XIV, 938; XV, 216
- pulp production, XIII, 1082
- radio-active substances affect growth of,
 XIII, 931
- respiration, XII, 973
- response to oxygen tension, XIV, (1030)
- Rhizopus* stem blight, XV, (598)
- ring rot (*Corynebacterium sepeponicum*), XV,
 211
- ring spot virus, XII, (1318); XIII, 525
- ripening, XII, 287, (288), 973; XIII, 665;
 XIV, 960 1773; XV, 373
- root(s)—
 excised—
 growth and respiration in, XV, 720
 growth, vitamins and, XII, (180), (982),
 1435; XIII, 206, 693, (697)

SUBJECT INDEX

Tomato root(s) excised (*continued*)—

- Phytophthora tumefaciens* and indole-3-acetic acid affect, **XIII**, (219)
- of polyploid plants, **XIV**, (793)
- ten years' work on, **XIII**, 1427
- water uptake by, **XIII**, (219)
- gentiobiose formed in, **XI**, 677
- growth effect on stem growth, **XIII**, 523
- rot (*Colletotrichum atramentarium*), **XIII**, 1436
- rot nematode, **XIII**, 217
- rootstock influence on growth, **XIV**, 1761
- salting of green, **XI**, 309
- sand culture, *see also* water culture, **XI**, 811; **XIII**, 207; **XIV**, 1275
- sawdust for use in cultivation, **XIV**, 1772
- seed—
 - extraction, **XIII**, 1417; **XIV**, 256, 1269; **XV**, 1805
 - growth substances and, **XIII**, 673
 - oil, **XII**, 1547
 - storage, **XIII**, 1562
 - treatment, **XIII**, 218; **XIV**, 265, 1277; **XV**, 727
- seedlings—
 - germinated from X-rayed seeds, **XII**, (982)
 - raising of, **XV**, 1804, 1806
- severe streak virus, **XI**, 1262
- shape-indicating nomograph, **XI**, 1251
- shoot-root ratio and moisture relations, **XV**, (431)
- smoking a cause of danger to, **XI**, 120
- sodium—
 - salts affect growth of, **XIV**, 779
 - sulphate in nutrient medium, **XII**, 177
- soil—
 - glasshouse, preparation of, *see* soil "sterilization"
 - response to differences in, **XV**, 725
 - "sterilization"—
 - costs, **XIV**, 1783
 - microflora of rhizosphere in, **XIII**, (1445)
 - practice of, **XI**, 1512; **XII**, 899; **XIV**, 777; **XV**, 742, 1092, 1160
 - use of straw in, **XII**, 972; **XIV**, 776
- soilless cultivation, *see* water culture and sand culture
- spacing, **XII**, 507, 508; **XV**, 715
- spotted wilt virus, **XI**, 812; **XIII**, 211, 1432, 1435; **XIV**, 264; **XV**, 212, 373
- spraying, wheel injury during, **XIII**, (219)
- staking and pruning, **XV**, 313
- starter solution tests with, **XI**, 1256; **XIII**, 1421, 1422
- stem—
 - ringing affects content, **XV**, 719
 - rot (*Didymella lycopersici*), **XII**, 1439; **XIII**, 527, 1441, 1442; **XIV**, 789; **XV**, 373, 1826, 1827
 - rot (*Phytophthora parasitica*), **XII**, (180); **XIII**, 1438; **XV**, 373
- storage, **XI**, 617, 619; **XII**, (288); **XIII**, 630, 665, 1423; **XV**, 1306, 1823
- straw used in glasshouse cultivation, **XII**, 972; **XIV**, 776
- streak disease, **XII**, 512
- target spot, *see* Tomato, *Alternaria solani*
- temperature affects growth, **XIV**, 1763
- tetraploid, **XIV**, 770
- tetraploidy induced by colchicine in, **XIII**, 201
- tip blight virus, **XIII**, 1432
- tissue tests to find fertilizer needs, **XV**, 1167

Tomato (*continued*)—

- tobacco grafts, **XI**, 1253; **XII**, 176, (513); **XIV**, 1761
- topping, **XI**, 1255; **XIII**, 1424
- transpiration, **XI**, 1258, 1259
- transplanting, **XI**, 1256; **XIII**, 1421, 1422
- Tree (*Cyphomandra betacea*), cultivation, **XIII**, 571
- varieties—
 - American, **XIII**, 132; **XV**, (758)
 - Canadian tests, **XIII**, 927
 - at Cheshunt, **XV**, 373
 - determinate, **XIII**, 928
 - disease-resistant, **XII**, 169, 170, 1438; **XIII**, 213
 - Early Chatham, **XIII**, 930
 - English outdoor, **XIII**, 521; **XV**, 1798, 1799
 - Pennheart, **XIII**, 1415
 - Tatura Dwarf Globe, **XII**, 968; **XIII**, 929
 - for Vermont, **XV**, (227)
 - Vetomold, **XIII**, 212, 1440
 - in Victoria, Aust., **XV**, (758)
 - vitamin C content of New Zealand, **XIV**, 1271
 - Washington State, **XIV**, 1760
 - yellow fruited, **XV**, 716
- vascular wilt (*Fusarium retusum*), **XIV**, (268)
- vegetative hybridization, **XII**, 971
- vernalization, **XI**, 117, 1024; **XII**, 504, 908, 970
- Verticillium* wilt, *see* wilt, *Verticillium*
- virus diseases, **XI**, 482, 812-814, 1261-1263; **XII**, 512, (1318), 1437; **XIII**, 211, 525, 1430-1433, 1435; **XIV**, 264, 783, (793), 955, 1278; **XV**, 157, 208, 209, 212, 213, 373, 730, 731, 1819, 1824, 1992
- vitamins—
 - A, B and C content not affected by phosphate level, **XV**, 375
 - A and C content increased by crossing, **XIV**, 260
 - B, and the, **XII**, 969, 1430
 - C content, **XI**, 1252, 1496; **XII**, 1429, 1431, 1432; **XIII**, 331, 1418, 1420; **XIV**, 1271, 1272, 1759; **XV**, 718, 889, 937, 1813
- walnut vicinity affects growth unfavourably, **XIII**, 1637; **XV**, 1817
- water culture, **XI**, 810; **XIII**, 204, 205; **XIV**, 778; **XV**, 1808
- watering—
 - excess, **XV**, 207
 - of greenhouse, **XIII**, 524
- weight fluctuations in, **XIII**, 1119
- wilt—
 - (*Fusarium lycopersici*), **XI**, 1264; **XII**, 1435, 1438; **XIII**, 213, 933, 1435; **XIV**, 784, 1279, 1778; **XV**, (598), 1173, 1174
 - spotted, *see* spotted wilt
 - vascular (*Fusarium retusum*), **XIV**, (268)
 - Verticillium*, **XIII**, 1437; **XIV**, 788, 1780; **XV**, 215, 373, 738
 - yellow fruited, use in trials, **XV**, 716
 - yield, relation of stem diameter to, **XIII**, 1426
- Tondali (*Coccinea cordifolia*) cultivation, **XIV**, 901
- Topworking, *see also* Frameworking—
 - apples, *see* Apple
 - cherries, **XII**, 1221
 - citrus, **XII**, 997
 - coffee, **XI**, 561

SUBJECT INDEX

- Topworking (*continued*)—
 fruit trees, **XII**, 46, 1218, 1219, 1222; **XIII**, 729; **XV**, 45, 990
 pecans, **XIII**, 788
- Toria (*Brassica napus* v. *dichotoma*), **XIV**, 1716
- Torsions, plant, and their analysis, **XIII**, 8
- Torula utilis* as protein, **XIV**, 1294
- Toxicodendron* spp., source of lacquer, **XV**, 191
- Toximeter, an insect, **XIII**, 126
- Trace elements, *see also* Fertilizer, minor elements, Micro-elements, Radioactive elements, Rare earths, etc., and individual elements—deficiencies, comparative susceptibility to, **XV**, 1687
 determination in kok saghyz, **XV**, 187
- Tracheal content affected by potash, **XI**, 723
- Tractors—
 farm, **XI**, 1085; **XIV**, 1018; **XV**, 32
 garden, **XII**, 766
- Training—
 on espaliers, sun radiation measurement, **XIV**, 464
 fruit trees—
 clamps used in, **XIII**, 1187; **XV**, 1463
 Oeschberg method, *see* Pruning
 pyramid form, *see also below*, spindle-bush, **XV**, 1451, 1463
 the spindlebush form, **XII**, 1259; **XIV**, (92)
- Transactions of the—
 Illinois State Horticultural Society 1943, **XV**, 934
 Peninsula Horticultural Society 1944, **XV**, 1359
- Translations of four phytopathological papers, **XII**, 1394
- Translocation studies, use of radioactive phosphorus in, **XIII**, 355
- Transpiration—
 in apple leaf, soil moisture and, **XI**, 1111
 in apple varies with stage of maturity, **XIV**, 63
 of Brazilian plants, **XV**, 814
 cell permeability and osmosis affect, **XI**, 1072
 in coffee, **XI**, 560
 correlation between internal surface of leaves and, **XIV**, (1476)
 dust affects rates in *Coleus*, **XII**, 356
 evaporating power of the air, **XIII**, 681
 fluctuations in, **XII**, (1195)
 leaf hopper injury affects, **XIII**, 112
 in lemon leaves, **XI**, 515
 measurement, **XI**, 348
 mineral uptake affected by, **XIII**, 357
 and root temperature in strawberry, **XII**, 410
 water supply during, **XIII**, 354
- Transplanting—
 apple trees, **XV**, 67
 growth substances for use at, **XII**, 340
 nursery trees, exposure at time of, **XV**, 1437
 peat for use at, **XV**, 1436
 root cutting instead of, **XIV**, 493
 of trees and shrubs in N.E. and N. Central U.S., **XIV**, 1543
 vegetables, use of starter solutions, *see* Starter solutions
 use of vitamin B at, **XI**, 1256
- Tras-os-Montes, Portugal, flora, **XV**, 429
- Travels of Constantine Samuel Rafinesque, **XV**, 27
- Treacle, apple, **XI**, 989
- Tree(s)—
 hopper (*Heliria praealta*), **XII**, 451
 ornamental, in Great Britain, **XIV**, 830
 propagation by seed, **XV**, 49
 and shrubs—
 at Cawthron Institute, N.Z., **XV**, (1865)b
 for England, **XV**, 919
 for S. Rhodesia, **XIV**, 1874
 useful bushveld, **XII**, 734
 stumps, removal, *see* Stumps
 surgery, **XI**, (737), 1154, 1157; **XII**, 420, 839; **XIII**, 337
 tomato (*Cyphomandra betacea*) cultivation, **XIII**, 571
 transplanting, *see* Transplanting
- Trialeurodes vaporariorum* control, **XI**, 452; **XIV**, (297); **XV**, 1692
- Tribolium* spp., storage pests, **XIII**, 1570, 1571
- Trichilia emetica* oil plant, **XV**, 359
- Trichloracetoneitrile as fumigant of stored fruit, **XV**, 344
- Trichogramma* counter parasites, **XI**, 914; **XIV**, 629
- Tricotyledony in *Brassicaceae*, **XIV**, 16
- Trifoliolate orange (*Poncirus trifoliata*) as citrus rootstock, **XV**, 777
- Triiodobenzoic acid as growth substance, **XIII**, 365
- Trillium* spp. seed dormancy, **XIV**, 1190
- Trinidad—
 agricultural readjustment, **XI**, 172
 Imperial College of Tropical Agriculture, *see* Imperial College
 Low Temperature Research Station, **XII**, 1108; **XIII**, 291
 and Tobago—
 Director of Agriculture, Administration Report 1940 and 1941, **XII**, 1160; **XIII**, (347)
 report of Agricultural Policy Committee, **XIV**, 424
- Tripsacum laxum*, **XIII**, 270
- Tripterygium* spp., Chinese insecticidal plants, **XI**, 438; **XIV**, 1657
- Tropaeolum majus*—
 growth substances and, **XV**, (34)
 vitamin C content, **XIV**, 1399
- Tropical—
 agriculture—
 manual on, **XV**, 1974
 research at Turrialba, Costa Rica, **XV**, 1233
 crop production in Gold Coast, **XIV**, 1879
 fruit(s)—
 for Florida, **XI**, 943
 nutritive value, **XIV**, 919
 pests, **XII**, 1072
 storage, **XII**, 280, 1108
 garden, the Fairchild, **XI**, 942
 plants—
 low temperature affects, **XII**, 239
 propagation with help of growth substances, **XV**, 810
- Tropics, food for health in Hawaii, **XIII**, 269
- Truck crops, *see* Vegetables
- Truffle—
 contamination of mushroom beds, **XIV**, 1802
 an edible, forest, *Delastriopsis oligosperma*, **XV**, (1185)
- Trunk injuries affect symptoms of potash deficiency, **XV**, 1549
- Tryptophane, *see* Growth substances
- Tuber formation affected by photoperiod and pruning, **XIV**, 995
- Tubers, composition of, **XIII**, 1579

SUBJECT INDEX

Tucumán—

Agricultural Experiment Station—

- A.R. 1939-1942, **XI**, 649; **XII**, 721, 1583; **XIV**, 1450
 library, **XIV**, 978
 work at, **XI**, 1523; **XIV**, 1316; **XV**, 1365
 agricultural progress in, **XIII**, 575
 list of insect pests, **XIV**, (1184)

Tulip—

- anthracnose (*Gloeosporium thumenii tulipae*), **XI**, 835
 blight, **XIV**, (1816)
 bud sports, **XI**, 1297
 bulb composition, **XI**, 136
 cultivation in Germany, **XII**, 545
 fire control, **XV**, 925
 manuring, **XI**, 826
 root response to growth substances in, **XIV**, 457
 tree (*Liriodendron tulipifera*), chemical composition during dormancy, **XI**, 676
 virus, **XII**, 198; **XV**, 242

Tung, *see also* Aleurites—

- bud dormancy prolonged by growth substances, **XII**, 1012; **XV**, 805
 budding, **XI**, 898; **XIV**, 1862
 chlorosis associated with potassium deficiency, **XIII**, 1493
 cluster bug (*Agonoscelis puberula*), **XIV**, 863
 cold—
 injury, **XII**, 1489
 resistance, **XII**, 228; **XIII**, 1491; **XIV**, 1450; **XV**, 931
 cover cropping, **XIII**, 1489
 cultivation, *see also* production
 cultivation—
 in Ceylon, **XII**, 225
 in Cyprus, **XI**, 897
 in Florida, **XI**, 1342
 in India, **XII**, 224
 in Latin America, **XIII**, 1001
 in Nyasaland, **XI**, 164, 532
 in S. Paulo, Brazil, **XIII**, 1000; **XIV**, 319
 in S. Africa, **XI**, 165, 895
 in Tucumán, **XII**, 721, 1583; **XIV**, 1450
 in U.S.A., **XIII**, 565
 in W. Australia, **XII**, 572
 death, causes of, **XI**, 896

deficiencies—

- copper, **XIII**, 1494
 iron, **XV**, 807, 930
 magnesium, **XIV**, 1863
 manganese, **XIII**, 1492; **XV**, 930

diseases, **XI**, 166

- dormancy prolonged by growth substance spraying, **XII**, 1012
 embryology, **XV**, 1907

Experimental Station, Nyasaland—

- A.R. 1943, **XIV**, 1446
 work at, **XI**, 1519; **XIV**, 1446; **XV**, 804, 2076
 flower peculiarities, **XII**, 226, 227; **XIV**, 862
 frenching, manganese sulphate and, **XII**, 1486
 frost resistance in, *see* cold
 growth period, **XII**, (229)
 hybrids, oil content, **XI**, 1344
 investigations at Zomba, Nyasaland, *see* Tung Experimental Station
 kernel, composition changes during germination, **XV**, 806
 low temperature and, *see* cold
 morphology, **XIII**, (566)

Tung (*continued*)—

- nursery trials, **XIV**, 1446
 nutrition, **XIV**, 1334
 pests, **XI**, (167)
 planting dates, **XII**, (229)
 pollen storage, **XII**, 1490
 pollination, **XIII**, 1488; **XIV**, 862, 1861
 production—
 in British Empire, **XV**, 1906
 in S. America, **XIV**, 320
 propagation, *see also* seed, **XIV**, 1446; **XV**, 804, 2076
 pruning, **XI**, (900)
 root distribution in sandy loam, **XIV**, 322
 seed—
 manipulation, **XII**, 1488; **XIV**, 860, 861
 selection, **XIII**, 1487
 seedlings, manuring of, **XIII**, 1490
 selection—
 in Florida, **XV**, 930
 in Nyasaland, *see* Tung Experimental Station
 soil management, **XIV**, 323
 transplanting, **XI**, 1343; **XII**, 1487; **XIV**, 321
 topworking, **XV**, 2076
 web blight of seedlings, **XIV**, (1875)

Turanodinia coccidarum parasitic on *Pseudococcus comstocki*, **XV**, 1041Turmeric (*Curcuma* spp.)—

- cultivation, **XI**, 1394; **XII**, 248, 1042, 1579; **XV**, 1952

planting in the Philippines, **XI**, 567

Turnip—

- aphid (*Rhopalosiphum pseudobrassicae*), **XI**, (821)
 black rot (*Pseudomonas campestris*), **XIV**, 233
 brown heart disease, **XI**, 464; **XII**, 161
 flea beetle control, **XIII**, (463)
 under glass, **XI**, 1209
 greens—
 composition, **XIV**, (2003)
 eating quality of, **XIV**, (2003)
 light affects ascorbic acid in, **XIV**, 996
 vitamin C—
 affected by cooking, **XI**, (291)
 affected by fertilizer and environment, **XIII**, 905

manuring, **XI**, 463; **XIV**, 724manuring, minor elements important in, **XIV**, 1730as oil plant, **XII**, 1401-1403seed moth (*Evergestis extimalis*), **XIV**, 234temperature and photoperiod affect growth, **XIV**, (1803)water core controlled by borax, **XIV**, 1247white spot (*Cercospora brassicae*), **XIV**, 725Turrialba, Costa Rica, Institute of Agricultural Sciences at, **XV**, 1233Twigs, tree, water content affected by method of cutting, **XII**, 776

Twinning—

cacao seedlings, **XIII**, 283of carrot roots for breeding purposes, **XIV**, 1729hevea seedlings, **XI**, 213, 1403; **XII**, 1514; **XIII**, 289, 664; **XIV**, 957*Tylenchulus semipenetrans*, **XII**, 563; **XIII**, 553, 980, 981, (1484); **XV**, 259*Tylenchus*—*coffaeae*, **XII**, 625*dipsaci*, **XIV**, 689*Typha* spp. eradication, **XI**, 88

SUBJECT INDEX

- Typhlocyba*—
froggatti, XI, 1175; XIV, 592
 spp. on apple, XIII, 112; XIV, 1622
 Tyroglyphid mites of stored products, XIV, 1392
Tyroglyphus dimidiatus, XV, (1852)
Tyrophagus lintneri, XV, 757
- Uganda—
 agriculture in, XI, 318
 Dep. Agric. A.R. 1940-1942/43, XI, (1054);
 XII, (1584); XIII, 1636; XIV, (2030)
 food crops as indicator plants in, XIII, 1503
Ullucus tuberosus tuber formation, XIV, 995
 Ultra-violet light method for selecting disease-free
 potatoes, XII, 930
 Umtali Sub-tropical Experimental Station, S.
 Rhodesia, XV, 2078
Unaspis citri, XIV, 1846
 U.S.S.R.—
 agricultural chemistry in, XIII, 1
 agricultural developments, XIV, 1
 agriculture in European, XII, 1168
 apple growing in various parts of, XV, 474
 horticultural problems, XIII, 378
 horticultural research—
 at the Kremenskaya field station, XIII, 708
 Mičurin small fruit station at Rossosh,
 XIII, 771
 at Mičurinsk, XIII, 716, 717
 Minsk station under the Germans, XIII,
 (709)
 literature received in England from, XIII,
 (351)
 science development, recent, XIV, 973, 974
 utilization of plant resources of, XV, (34)
 vegetation of European, XIV, 2
 Union of S. Africa, *see* South Africa
 United Planters Association of Southern India,
 Tea Scientific Section, A.R. 1942/43 and
 1943/44, XV, 390
 United Provinces, India—
 Dep. Agric. A.R. 1938/39, XI, 1524
 fruitgrowing in, XII, 1071-1075, 1077-1080,
 (1095)
 U.S.A.—
 agriculture in, XII, 1167
 agric. Exp. Stats., list of bulletins issued
 1939-1942, XII, 733; XIV, 2015
 Dep. Agric. research work, November 1941,
 XIV, (1455)
 Urals, apple varieties of, XI, 1095
 Uramon in spray form as nitrogenous fertilizer,
 XIV, 72
 Urea—
 -ammonia liquor as source of nitrogen, XI,
 685
 condensation product as fertilizer, XV, 411
Urena lobata, a fibre plant, XI, 1042, 1362; XIII,
 584; XV, 369, 632, 1243
Urginea maritima, vegetative propagation, XIII,
 450
Urocystis cepulae, XI, 1241; XV, 690
Uromyces—
appendiculatus, XIII, 1448
phaseoli, XIV, 801
Urtica dioica uses, XII, 1392, 1549; XIV, 1669;
 XV, (758)
 Uruguay—
 flora of, XII, 594
 plant resources, XII, 1020
- Vaccinium*—
V. corymbosum, *V. pennsylvanicum* and
 others, *see also* Blueberry
V. oxycoccus, *V. macrocarpon* and others, *see*
also Cranberry
 chromosome numbers in, XI, (1137)
corymbosum, nutrient media, XIII, 72
 spp. in Maine, XI, (1137)
Vaginulus langsdorfi control, XII, 240
 Valerian—
 growing conditions affect composition, XV,
 162
 varieties, three German, XV, (1852)p
 Valuation of orchards, XII, 782
 Vanadium—
 affects N fixation, XIII, (23)
 pentoxide as catalyst for sodium chlorate,
 XII, 131
 Vanilla (*Vanilla planifolia*)—
 curing, XI, 312, 1485; XV, 1946
 growing, XIV, 1350; XV, 1286, 1945
 history, cultivation and importance, XV,
 1286
 shade requirements, XV, 293, 1944
 Vapour as culture solution, nutrient, XV, 4
 Variations in nursery on clonal apple and pear
 stocks, XI, 707
 Variegation, infectious, XII, 1394
 Variety(ies)—
 description of horticultural, identification
 methods, XII, (1217)
 differentiation, morphological methods for,
 XV, 11
 fruit—
 for Iowa, XIV, 36
 new, and nuts, register of, XV, 440
 for Ontario, XIII, 726
 trials—
 cubic lattice design in, XV, (34)
 at Wisley, rules for, XV, 1072
 Vascular tissues in seed plants, origin and growth,
 XIII, 683
 Vegetable(s) *see also* Market garden—
 American, key to common, XIV, (1803)
 arsenic content resulting from lead arsenate
 sprayed ground, XIV, 1679
 biochemistry, XIV, 638; XV, (1336)
 blanching, XII, 1542; XIII, 325, 326; XIV,
 (2003); XV, 2038
 boron—
 content, XIII, 855
 limits in use for, XII, 471
 necessary for, XIV, 1675
 breeding—
 in Switzerland, XV, 2079
 at Vineland, Ont., XI, 1525
 canned—
 bacterial flora, XV, (2059)g
 carotene in, XV, 881
Clostridium botulinum checked by dissolved
 tin, XIV, 1428
 hydrogen swells in, XV, 1330
 canning, XI, 633, 634; XII, 1542; XIII, 325,
 326, 1071, 1630; XIV, 2018, 2019; XV,
 881, 1330, (2059)g
 carotene content, XIV, 1673; XV, 883
 climate and, XIII, 130
 composition—
 of Ceylon, XIII, 587
 of common, XII, 315;
 tables, XIV, 1957
 consumption in U.S.A., XV, 604

SUBJECT INDEX

Vegetables (*continued*)—

- cooking affects nutrient content, **XI**, 1002, 1497, 1498
- culture solution optimum for, **XI**, 95
- cut surfaces, penicillium development on, **XIII**, 19
- deficiency symptoms and diagnosis, **XIII**, 799, 800; **XIV**, 177, 1672, 1673; **XV**, 85, 1684
- dehydrated, *see also* dried—
 - effect of blanching, **XII**, 297
 - moisture significance in, **XV**, 1325
 - peroxidase activity in, **XV**, (2059)n
 - powdered, **XIII**, 1065
 - sulphuring, **XIII**, 1066
 - vitamin losses in, **XIV**, 1405
 - vitamin C stability in, **XIII**, 329
- dehydration, *see also* drying—
 - compressed block, **XIV**, 380; **XV**, 2036
 - costs, **XIV**, 1421; **XV**, (911)
 - domestic, **XIV**, 384
 - by electronic method, **XIV**, 380
 - in New Zealand, **XV**, 2075
 - palatability affected by, **XIV**, 1977
 - in S. Africa, **XIV**, 1448; **XV**, 1362
 - in S. Rhodesia, **XV**, 2078
 - sulphiting problems, **XV**, 1325
 - surveys of progress, **XIV**, 380, (387)
 - waste water disposal from, **XV**, (1336)
- diseases—
 - in England, **XI**, 96, 443, 813, 1211; **XII**, 147, 467; **XIII**, 860
 - manuals, **XI**, 1210; **XIII**, 657; **XIV**, (290); **XV**, 609, 1695
 - market, **XII**, 907
 - in Nebraska, **XIV**, 178
 - in Oklahoma, **XV**, (1852)k
 - in Ontario seedbeds and cold frames, **XIV**, 1202
 - resistance to, **XI**, 1212; **XIII**, 179
- dried, *see also* dehydrated—
 - cooking tests, **XV**, 2033
 - enzyme reactions in, **XV**, 341
 - refreshing of, **XII**, 1130
- drying, *see also* dehydration, **XI**, 1480, 1482, 1483; **XII**, 297, 681, 682, 684, 685, 1120-1122, 1130, 1540, 1541; **XIII**, 646, 648, 649, 1052, 1053, 1056, 1064-1066, 1592-1595, 1599-1602, 1630, 1633; **XIV**, 380, 384, (387), 929, (945), 1406, 1421, 1977, 2019; **XV**, 335-337, 383, 879, 1327, 1362, (2059)x, 2075, 2078
- "dynamics", **XII**, 738
- early, in S. Africa, **XIV**, (1803)
- electric hotbeds for field-grown, **XIII**, 1341
- evaluation, **XI**, 447; **XIV**, 1195, 1196, (1803)
- for exhibition, size required, **XV**, 133
- fertilizers, *see* manuring
- folklore in France, **XV**, 1076
- as food, **XI**, 1004; **XII**, 701; **XIII**, 1332, 1333
- frozen—
 - microscopic studies, **XIII**, (335)
 - test for adequacy of blanching, **XIV**, 1390
 - pack preservation, *see* storage, frozen pack
- for frozen pack, choice of, **XIV**, 937; **XV**, 1667
- fungicides, **XV**, (598)
- gardening in N. Jersey, home, **XIV**, 1667
- grading tables, **XIV**, 642
- green—
 - carotene in fresh and frozen, **XIV**, 1963
 - as protein foods, **XI**, 1502

Vegetables (*continued*)—

- growing—
 - acceleration of development in open, **XII**, 906
 - in Algeria, **XV**, 1077, 1078, 1661, 1662
 - in the allotment, **XIII**, (947)
 - in Arctic, **XV**, 602
 - on arsenic-contaminated soils, **XV**, 76
 - under artificial light, **XI**, 782; **XIII**, 458
 - in Australia, **XIV**, 1456, 1664
 - in Barbados, temperate, **XII**, 1573
 - in Bermuda, **XII**, 1148
 - in Brazil, **XV**, (1298)
 - in California, economic considerations on, **XIV**, 1195, 1196, (1803)
 - compost value in, **XIII**, 61
 - in Costa Rica, **XII**, 589
 - in desert regions, **XIV**, 435
 - early, in Europe, **XV**, 1665
 - in England, **XI**, 91, 102, 442, 443, (488), 781, 1205; **XII**, 139, 895-898, 905, 1570; **XIII**, 453, 847, 1330; **XV**, 1073, 1660, 2068
 - flower growing replaced by, under glass, **XI**, 822
 - in Germany, **XIV**, 163, (641)
 - under glass, **XI**, 92; **XIII**, 458, 850
 - in Gold Coast, European, **XV**, 377
 - intensive, in Switzerland, **XII**, 903
 - in Malaya, **XII**, 313
 - in Malta, **XV**, 1664
 - manual, **XIV**, (1803); **XV**, 2068
 - mechanization in, **XIV**, 1193; **XV**, 1086
 - modern methods, **XI**, 1206; **XII**, 1570
 - on moor soils, **XIV**, 164
 - in N. S. Wales, contract, **XIV**, (641)
 - in N. Queensland, **XIV**, 1931; **XV**, 312
 - in sand, **XIV**, 646
 - in Scotland, **XI**, 90
 - in Siberia, early, **XV**, 1666
 - in South Africa, **XIII**, 454-457; **XIV**, (1803); **XV**, 1074
 - in S. Rhodesia, temperate, **XII**, (1496)
 - in Switzerland, **XII**, 903, 904
 - in Texas, **XI**, 445; **XII**, 1494
 - in Trinidad, **XII**, 269
 - in United Provinces, India, **XIII**, 296
 - in Wales, **XV**, 1075
 - in Wyoming, **XV**, (1852)f
- growth—
 - affected by temperature and day length, **XI**, 93; **XIII**, 856
 - substances for dipping roots of young, **XIV**, 172
- insecticides for use with, **XV**, 1097, 1098
- instead of flowers, how to produce, **XI**, 822
- irrigation, **XV**, 486, 1084, 1348, 1694
- juice—
 - manufacture and storage, **XIII**, 652
 - vitamin C, carotene, calcium and phosphorus in expressed, **XIII**, 323
- keeping quality, estimation, **XI**, 618
- lead arsenate in soil affects, **XIII**, 1338
- leaf waste, carotene from, **XV**, 1315
- lignin content of common, **XI**, (1278)
- locker freezing, *see* storage, frozen pack
- magnesium deficiency, **XI**, 785
- in Malaya, leaf and other, **XI**, 247
- manganese deficiency, **XI**, 786
- manuring—
 - chloride importance in, **XII**, 465
 - common salt for, **XII**, 143

SUBJECT INDEX

Vegetable(s) manuring (*continued*)—

- composts used for, *XIV*, 651
- in England, *XII*, 910, 911, 1359; *XV*, 1676, 1677
- in Germany, *XI*, 448
- green, *XIV*, 650; *XV*, 1682
- intermittent, *XV*, 1681
- liquid fertilizer for, *XII*, 144; *XIII*, 178
- nitrogenous, affects vitamin C content, *XV*, 1679
- organic, *XIV*, 173-176, 1197; *XV*, 1678
- peat, *XIV*, 174
- phosphatic, *XII*, 466, 1376; *XIII*, 1336; *XIV*, 1674; *XV*, 1680
- potassic, *XIII*, 1335; *XIV*, 647
- on sewage farms, *XIV*, 649
- sewage sludge for, *XIV*, 1200; *XV*, 1082
- in S. Africa, *XIII*, 1337
- trace element significance in, *XIV*, 648
- in U.S.A., *XIII*, 65, 66, 667, 1334; *XIV*, (1803)

marketing—

- in N. S. Wales, *XV*, 1675
- in Queensland, *XIV*, 171
- regulations in Sweden, *XV*, (1852)w
- in Rio Piedras and San Juan, *XIV*, 640

marrow(s)—

- discussion on, *XIII*, 519
- diseases, *XIV*, 1267

seed—

- extraction, *XIV*, 1269
- production, *XIII*, 1413
- wilted by *Fusarium sambucinum*, *XV*, 1793

matter in soil, decomposition, *XI*, 23mineral and vitamin distribution in different parts of, *XII* 705mulching, straw, *XV*, 137nitrogen needs, in Alabama, *XIV*, (1803)nutrition, *see* manuringnutritive cost values of some, *XV*, (2059)uoil expression, *XII*, (1142)origin of common, *XIV*, 1186, 1663packing, *XI*, 1509; *XIV*, 642peeling method, the explosion, *XIV*, 1981

pests—

- derris for control, *XIV*, 1682
- in England, *XI*, 94; *XIII*, 861; *XIV*, 658
- in Florida, *XV*, 611
- in Germany, *XII*, (462); *XIV*, (290)
- in Illinois, *XII*, 148
- in N. Jersey, *XIII*, (463); *XIV*, 1677
- in Punjab, *XV*, 613
- of seed, in U.S.S.R., *XIV*, 169
- in S. Australia, *XIV*, 659

pickled, cooking of, *XIV*, 1430for pickling, *XII*, 140

planting distance, relation of natural crossing

to, *see* seed production isolationpollination, how effected, *XV*, 1669preservation, *see also* storage—

- home, *XI*, 277, 635; *XII*, 1544; *XIV*, (945)

by lactic acid fermentation, *XIV*, (1431)in the Punjab, *XIV*, 1956by quick freezing, *see* storage, frozen packby salting, *XI*, 309; *XIII*, 1068, 1069, 1613;*XIV*, 376, 1426; *XV*, 1333

processing—

- at home, *XIII*, 1070, 1071
- and vitamin content, *XV*, 885

products, diced, *XV*, 1325provitamin A content, *XIV*, 1959Vegetables (*continued*)—

- quality, meaning of expression, *XIV*, 1668
- red legged earth mite control (*Halotydeus destructor*), *XIV*, 662

research—

- in Arizona, *XIV*, 1436

- in Australia, *XV*, 369

Station—

- Alnarp, Sweden, A.R. 1939, *XIII*, 1090

- in England foreshadowed, *XV*, 1073

riboflavin in, *XI*, 283root, in U.K., *XI*, 102rotations, *XIV*, (641)sampling, *XIV*, (1298)sand culture, *XIV*, 646

seed—

- germination, soil moisture and, *XIV*, 645

investigations—

- at John Innes, *XIII*, 665

- in Murray Valley Irrigation Area, Aust.,

- XV*, 1672

phosphatides composition, *XIII*, (1454)

production—

- in Arizona, *XIII*, 136

- in Australia, *XII*, 463; *XIV*, 168; *XV*,

- 1348, 1671

- boron and, *XV*, 608

- in California, *XII*, 1353

- in East Africa, *XII*, 1349; *XIV*, 1189;

- XV*, 130

- in Èire, *XII*, 141

- in England, *XI*, 11, 780; *XII*, 1350,

- 1351; *XIII*, 135, 1625; *XIV*, 960, 1445

- in Idaho, *XV*, 1350

- in India, *XIII*, 1331

- isolation needs, *XIV*, 167, 960; *XV*,

- 131, 935

- in Oregon, *XV*, 941

- pests, *XIV*, 169

- in South Africa, *XII*, 1348; *XIII*, 454,

- 455, 457; *XIV*, 1188, 1448

- a survey, *XIII*, 1099

- in Sweden, *XII*, 1563; *XIII*, 340

- in U.S.A., *XIII*, 134; *XIV*, 166

- in U.S.S.R., *XIV*, 170; *XV*, 1079

- in W. Africa, *XIII*, 341, 342

size affects cropping, *XI*, 446

- storage, *XI*, 1355; *XIII*, 134; *XIV*, 166,

- 423; *XV*, 386

- threshing, *XV*, 1673

treatment—

- with disinfectants, *XV*, 132, (597)

- with growth substances, *XI*, 787; *XII*,

- 344

seedlings, raising, *XV*, 134

soil—

- acidity, *XIV*, 1200

- management, *XIII*, 852

- moisture and irrigation, *XIII*, (231)

- phosphorus in, *XI*, (488)

sprays, DDT aerosol, *XV*, 1697, 1698storage, *see also* preservation—

- in Bombay, *XV*, 1998

- Canadian work, *XIV*, 2019

- carbon dioxide affects sugar content in,

- XIV*, 1950

- in clamps, *XI*, 618; *XIV*, 914

- cold, *XI*, 615

- cooling load, *XV*, 315

- of dried, *XV*, 904

- emanations during, measurement of, *XII*,

- 1530

SUBJECT INDEX

- Vegetables, storage (*continued*)—
 frozen pack, **XI**, (291), 614; **XII**: 1101;
XIII, 1566; **XIV**, 353, 369, 1307, 1308,
 1352, 2000, 2002
 home, **XIII**, 624, 1573
 manual in German on, **XII**, (1536)
 oxygen concentration important in, **XIV**,
 913
 in the Punjab, **XIII**, 1094
 in Sweden, **XIV**, 913
 in Switzerland, **XI**, 1509; **XII**, 1098;
XIV, 937
 temperature affects, **XII**, (1114)
 sugar content affected by storage atmo-
 sphere, **XIV**, 1950
 trials—
 in Cornwall, **XIV**, 1192
 in England, **XIV**, 1445
 in Germany, **XIV**, 165
 in Uganda, **XIV**, 362
 variety(ies)—
 Danish trials, **XV**, 690
 English trials, **XII**, 1150; **XV**, 1072
 in Florida, **XV**, 1663
 for freezing preservation, **XIV**, 937; **XV**,
 1667
 in Michigan, **XIV**, 1665
 selection in U.S.S.R., **XV**, 1668
 in Sweden, **XIII**, 452; **XV**, 129, 601
 in Winter Garden region, Texas, **XIV**, 639
 vitamin(s)—
 A in, *see also* provitamin A, **XI**, 444,
 1004, (1506); **XII**, 292; **XIII**, 637
 B₁ or B₂ in, **XI**, 285, 1001, 1498; **XIII**,
 637; **XIV**, 637; **XV**, 885
 C in, *see also* Vitamin C, **XI**, 281, 282, 290,
 444, 784, 1000-1004, 1493; **XII**, 685,
 705, 1134, (1142); **XIII**, 319, 320, 323,
 324, 329, 636, 637, 1064, 1581, 1610;
XIV, 636, 637; **XV**, 322, 326, 328, 329,
 880-883, 1314, 2022
 in dehydrated, **XIV**, 1405
 P in, **XIII**, 1583
 preservation during drying, **XV**, 879
 in salted, **XIII**, 1069
 wastage, **XI**, 1446
 waste, processing, **XV**, 2023
 waxing, **XIV**, 1947
 weed control in, **XIII**, 864; **XIV**, 179, 744,
 1678; **XV**, 1700
- Vegetation—
 of European Russia, **XIV**, 2
 of San Martin en Corrientes, Argentina,
XIV, (19)
 terms applied to different types, **XV**, 30
 Vegetative cover, relation to soil drift, **XIII**, (67)
- Venezuela—
 agricultural education and research, **XIII**,
 574
 agric. Exp. Stat. A.R. 1939, **XIII**, 669
 natural resources, **XII**, 1021
- Venturia—
inaequalis, *see* Apple scab
pirina, *see* Pear scab
 spp., present knowledge, **XII**, 444
- Veratrum viride* as insecticide, **XI**, 440
- Vermouths, characteristics of Uruguayan, **XIV**,
 1993
- Vernalization—
 conditions favouring hardening of plants,
XI, 360
 cucumber, **XII**, 965
- Vernalization (*continued*)—
 lettuce, *see* Lettuce
 mustard, *see* Mustard
 onion, **XIII**, 184, 1400
 possible effect on bios components and
 vitamin C in plants, **XIII**, 15
 potato, **XI**, 1218
 root crop, **XII**, 908
 sunflower, **XII**, 1405
 tomato, *see* Tomato
 value of, in Switzerland, **XII**, 759
- Verticillium*—
 on guayule, **XV**, (597)
 spp. causing hop wilt, **XII**, 1397; **XIII**, 163;
XIV, 966
 wilt—
 of plums (*V. albo-atrum*), **XIV**, 1608
 of tomato, *see* Tomato
 of *Viburnum*, **XV**, (774)
- Vessels, differentiating, cell wall structure in, **XI**,
 362
- Viburnum*—
furcatum, propagation by cuttings, **XV**, 51
Verticillium wilt, **XV**, (774)
- Victoria, Aust.—
 fruit statistics, **XV**, 1408
 horticulture in, **XII**, 780
- Vigna catjang*, *see* Cowpea
- Vigour—
 measurements, statistical interpretation, **XIII**,
 1142
 of tree differs from that of seedling in apple,
XIV, 1508
- Vinca* spp., *see* Periwinkle
- Vine—
 aerial propagation of, **XI**, 1139
 Almeria, *see* Vine Ohanez
 ampelography, **XII**, 412, 1276, 1277
 anthracnose (*Gloeosporium ampelophagum*),
XIV, 1143
 apoplexy, **XI**, 72
 bacterial blight (*Erwinia vitivora*), **XI**, 426,
 756
 a bacterial disease in Switzerland, **XV**, 555
 biochemical studies, **XI**, (737)
 bios distribution in leaves, **XIV**, (1030)
 boron deficiency, **XI**, 1152; **XIV**, 540; **XV**,
 88
 breeding, **XI**, 144; **XII**, (414); **XIII**, 782,
 (1227); **XIV**, (1102), (1184)
 by-products, **XIV**, 939, (945); **XV**, (83)
Byttiscus betulae pest, **XIV**, (635)
 chlorosis, **XII**, 1300; **XIII**, 805, 1250, 1251;
XIV, 558, 1112; **XV**, 944
 clone selection in Switzerland, **XV**, 1522
 cluster thinning, **XIV**, 1559
 copper deficiency in currants and sultanas,
XIV, 556
 cordons, **XV**, 1000
 court noué, *see* infectious degeneration
 cover crops for, **XIII**, 781
 currant, **XII**, 834
 cuttings—
 effect of nutrition and phytohormones on,
XIII, 780
 growth substances for, **XIV**, 105, 106;
XV, 1519
 size suitable, **XIV**, 537
 dead arm disease, **XIII**, 1282
 deficiency symptoms, **XI**, 66, 67; **XII**, 1299;
XIII, 1152, 1225, 1246; **XIV**, 540, 556,
 1575, 1576; **XV**, 88

SUBJECT INDEX

Vine (continued)—

direct producers, *see also* hybrids, **XI**, 1138; **XV**, 944

diseases—

deficiency and excess, **XIII**, 1225, 1246
in Eastern U.S.A., **XII**, 865; **XV**, (1658)n
in the Paris region, **XII**, 860
sulphur a cure for, **XV**, 119, 1583, 1586, 1587

Pierce's disease=Anheim or California disease, **XIII**, 815; **XV**, (598)

downy mildew (*Plasmopara* [*Peronospora*] *viticola*), **XII**, 1154; **XIV**, 549; **XV**, 944, 1035-1037, 1584, 1585, 1588, 1593

drainage in Murray Valley, **XIII**, 83, 84

drop berry and desiccation of stalk, **XI**, 66, 67

dry stalk, a heat phenomenon, **XIV**, 557

"dying" vines disease, **XII**, 841

eelworms (*Criconeuma rusticum*), **XV**, 944

erinoise, sulphur a cure for, **XV**, 119

fertilizer, *see also* manuring—shortage, **XIII**, 1226

frost—

damage, **XIV**, 568, (1184), 1582; **XV**, 1557, 1559

protection, **XIII**, 811; **XIV**, (1184); **XV**, 1348, 1558-1560

-resistant American varieties, **XII**, (1296)

fruit, *see also* grape—

bud distribution, **XI**, 63

fall, spraying to prevent, **XI**, 1140

set, **XI**, 64

fumigation, **XIV**, 628

grafting—

growth substances for, **XI**, 413; **XII**, 1162; **XIV**, 106; **XV**, 1519, 2079

herbaceous whip, **XI**, 414

importance of height of buds when, **XII**, 836

grape(s)—

berry moth, *see* moths

black rot control, **XV**, (598)

Botrytis rot in store, *see* grape rot

collection at Antibes, **XV**, 1367

currant, *see* Vine, grape, dried

dried—

oxidase activity in, **XII**, 1128

production in Murray Valley, **XII**, 834; **XIII**, 83

drying and varieties for, **XII**, 834, 837, 1127, 1128, 1146, 1147; **XIII**, 1063, 1630; **XV**, 1362, (2059)x

exports from S. Africa 1930-39, **XII**, 88

grading, **XI**, 1447

harvest, **XIV**, 1371

juice—

making, **XI**, 295, 629, 1468; **XII**, 1147; **XIII**, 1605

moulds in, **XV**, 2046

Oechsle test for, **XV**, (2059)y

vitamins and similar constituents in, **XI**, 296, 996; **XII**, (1142); **XIV**, 1561

leafhopper (*Erythroneura comes*), **XIII**, (845)

maturity, **XI**, (416); **XII**, 413, 1127; **XV**, 521

moth, *see also* Vine moths

moth—

parasite, *Euplectrus agaristae*, **XV**, (128)

Muscadine, vitamin C in, **XIII**, 86

packing, *see* Vine, table grape storage and

packing

oil, **XII**, 1546, 1547; **XV**, 358, 2054

Vine grape (continued)—

plume moth, **XIV**, 1632

refractometer value of Palatinate, **XIV**, (945)

residue for hot beds, **XII**, 838

root worm (*Fidia viticida*), **XV**, (1658)o

rot, *Botrytis*, **XI**, 977; **XII**, 670; **XV**, 2079

storage and packing, *see* Vine, table grapes table, *see* Vine

tannin production, **XIV**, 397

valuation according to sugar content, **XI**, (740)

wastage, **XI**, 977, 1143

growing—

in Algeria, **XV**, 1662

in Alsace, **XII**, (414)

in Australia, **XIV**, 1556

in Baden, **XII**, (414)

basic research problems, **XII**, (414)

in Bordeaux region, atlas of, **XIV**, 535

in California, varieties for, **XIV**, 536

in the Camargue, France, **XV**, 1511, 1513

in Central Anatolia, **XI**, 411; **XIV**, 1557

in Central Belt of European Russia, **XIII**, 783

in the Don Valley, **XV**, 1015

in England, **XII**, (1279); **XIV**, 103

on espaliers, **XIV**, (110)

in Kazakhstan, **XIV**, 541

in Massachusetts, **XII**, (833); **XV**, 1512

mechanization of, **XII**, 835

in Mildura Irrigation Settlement, **XI**, 65

on a mixed farm in S. Africa, **XV**, 78

mixed with fruit growing in Switzerland, **XV**, 1412

in Murray Valley Irrigation Settlements, **XI**, 65; **XII**, 834

in N. Zealand, home, **XIV**, 1098; **XV**, 383

in Ontario, **XIV**, 1090

part of it grown indoors, part out, **XV**, 1514

in the Punjab, **XIII**, (1227)

in Rumania, identification of vines, **XI**, 410

in the sands of the Camargue, **XV**, 1511, 1513

in S. Africa, **XV**, 78

in S. Australia, **XV**, 1510

in Spain, **XV**, 1016

in Styria, **XI**, 62

in Switzerland, **XIV**, 1096; **XV**, 80, 82, 1412

in tropical America, **XII**, 655

in U.S.S.R.—

champagne grapes, **XV**, 1518

Far East, **XIV**, 104

in Valais, reconstruction, **XIV**, 1096; **XV**, 82

in Washington State, **XIII**, 85

hail damaged, **XIII**, 1241

hybrids, *see also* direct producers—

Riesling \times Sylvaner, **XIV**, 1095

leaf distinguishing features, **XIV**, 1091-1093

infectious degeneration [=court noué], **XIV**, 573, 1125; **XV**, (1658)f

injection apparatus, **XV**, 1526

intercropping, **XIII**, 1226

irrigation, **XI**, 54, 66; **XIII**, 83; **XV**, 63, 82

leaf—

distinguishing features, **XIV**, 1091-1093

hoppers, **XII**, 126; **XIV**, (1662); **XV**, (1603)

measurements, **XV**, 1515

scorch, **XIII**, 1225

spot (*Isariopsis fockellii*), **XII**, 447; **XIV**, (1184)

SUBJECT INDEX

Vine (continued)—

little leaf, *see also* zinc deficiencies, XIII, 1225, 1246; XIV, 1576

manuring—

in general, XI, 1141; XII, 837, 1147; XIV, 538, 539; XV, 1524, 1525

green, XII, 837; XV, 61

maturity—

standards in Baluchistan, XIII, 414

studies with California, XII, 1278

of Uruguayan, XIV, 109

mealybugs (*Pseudococcus* spp.), XIV, 593, 628

mildew, *see* downy mildew and powdery mildew

mites—

(*Phyllocoptes* and *Eptrimerus vitis*) control, XIV, 549, (1184)

(*Tetranychus pacificus*), XII, 448

moisture deficiency, XI, 66, 67

moths (*Clysis*, *Conchylis* and *Polychrosis* spp.

and *Phalaenoides glycine*), XI, (779),

1193; XIII, (845); XIV, 549, 1157, 1441,

1451, 1558, 1632; XV, (128), (599)

muscadine—

angular leaf spot (*Cercospora brachypus* and *Mycosphaerella angulata*), XII, 861

in Georgia, XII, 89

pruning, XIV, (110)

vitamin C in grapes of, XIII, 86

Muscat of Alexandria, zinc deficiency in, XII, 1299

origin, XIV, (543)

Ohanez, pollination of, XIII, 413; XIV, 108

oidium, *see* powdery mildew

pests—

control in Germany, XIV, (635)

and diseases conference at Wädenswil, XIV, 549

in Eastern U.S.A., XII, 865; XIV, 1632; XV, (1658)n

Phylloxera vastatrix—

carbolineum control of, XV, 2079

immune seedlings, XIII, 798

reconstruction to control, in Valais, XIV, 1096

research in Switzerland, XIV, 139, 549, 1096; XV, 2079

-resistant rootstocks, XIV, 1621

planting distances, XIV, 1558

pollen—

-containing sprays for Ohanez, XIII, 413

life of, XII, 1275; XIV, 1100

production, regulating time of, XV, 1523

storage, XIII, 1222

pollination of Almeria (Ohanez), XIII, 413; XIV, 108

potassium—

+ boron deficiencies, XV, 88

status shown in leaf petioles, XIII, 1223

powdery mildew (*Oidium*), XV, 566, 1035, 1037, 1586, 1587

propagation, *see also* cuttings and grafting—

aerial, XI, 1139

pruning—

may affect wine quality, XV, 347

practice, XI, 415; XII, 837; XIV, (110), (1102), 1560; XV, 81, (83)

quality determination, XV, 1516

raisin moth (*Ephestia figulilella*), XIV, 383

Vine (continued)—

raisins, *see also* grapes, dried—

factors influencing the yield, composition and quality, XIV, 1414

production, XII, 1127, 1128

red leaf, XII, 448

"reisig" disease, *see* infectious degeneration research—

at Merbein, XIII, 1630

at Saittas, Cyprus, XI, 1025

Rhynchites betuleti pest, XIV, (635)

ringing, XI, 67

roots, aerial, XIV, 1094

rootstocks—

American—

in Switzerland, XIII, 1221

in Tunis, XI, 412

for American, XI, 1017; XIV, 107; XV, 1521

phylloxera-resistant, XIV, 1621

in the Province of Venice, XII, (1279)

: scion incompatibility, XIII, 1219, 1220

scion influence on, XV, 1520

rougeot or rote breuner (*Pseudopeziza trachelophila*), XIII, 427; XIV, 581; XV, 1589, 1590

seed, identification by, XII, (1279)

selection of clones for improvement, XV, 1522

shoot pinching affects fruit set, XI, 64

shoots for fuel, XV, (1336)

soil(s)—

analysis, XV, 944

cultivation for, XI, (1142); XIV, 538, 542

moisture conservation for, XIV, 542

in Paarl area, S. Africa, XIII, 1224

of the Palatinate, Germany, XIV, (543)

and physiological trouble, XIII, 1225

stabilization by, XIV, 462

spraying apparatus, XV, 1639

sprays—

copper oxychlorides, XV, 1591

copper-sparing, XIV, 1171

sulphuring, XV, 1583, 1586, 1587

sultana, *see* grape drying

table grapes—

production—

on espaliers, XIII, 1218

at Paarl, S. Africa, XI, (740)

in Switzerland, XIV, 1097

soil, nature of Paarl, XIII, 1224

storage and packing, XI, 274, 275; XII,

670, 1146; XIII, 626; XIV, 1371;

XV, 318, 319

training—

in Argentina, XV, 1528

in Province of Venice, XII, (1279)

transplanting times, XV, 1527

trials, lay out of, XV, 1517

tying, paper thread as substitute for raffia, XIV, 1099

varieties—

Campbell Early, rootstocks for, XIV, 107

at Lyallpur, XIV, (110)

Portuguese, XII, 1276, 1277; XIII, 1217

Waltham Cross, XI, 66, 67

webbing moth (*Tenuipalpus californicus*), XII, 336

wine types, suitability for making particular, XI, 1464

yields, climate and, XV, 79

zinc deficiency, *see also* little leaf, XII, 1299; XIII, 1246; XIV, 1575, 1576

SUBJECT INDEX

Vinegar—

- lead determination in, by spectrography, XII, (708)
- from sugar cane and fruit juices, XIII, 1608

Vineland—

- breeding and selection work on fruit, XV, 1417, 1420, 1421
- hort. exp. Stat. Rep. 1939/40-1941/42, XI, 1050, 1525; XIII, 670

Violet—

- commercial production in England, XIV, (1312)
- oedema, a scab disease, XV, (596)

“Viruliferous”, significance of term, XV, (128)

Virus(es)—for detail see particular viruses—

- albino cherry, XV, (597)
- in apple, see Apple
- in apricot, ring spot, XII, 850
- aster yellows in *Lactuca* spp., XIV, 1748
- in avocado, sunblotch, XI, 542; XII, 585
- in banana, bunchy top, XI, 243
- in beans, see Bean
- in blueberry, stunt, XV, 1565
- in broccoli, mosaic, XIII, 189
- in cabbage, see Cabbage
- in cacao, XI, 931, 1027, 1514; XII, 1041; XIII, 1525; XIV, 883, 1349, 1438, 1899; XV, 376, 378, 932, 1258, 1264, 1274
- in *Canna indica*, mosaic, XII, 243
- CO₂ diminishes susceptibility to, XV, 219
- in carrot, XII, (1454); XV, 682
- in cauliflower, XIII, 188
- celery mosaic, XIII, (231)
- chemistry of, XIII, 1629
- in cherry, see Cherry
- in citrus, see Citrus
- compositing affects tobacco, XV, 935, 1090
- control, see also inactivation control—
 - by cultural means, XI, 423
 - by heat, XII, 849
 - by tannins, XI, 1369
- in cranberry, false blossom, XII, 849; XIV, 1127
- in cucumber, XIII, (947); XIV, 254
- in dahlia, XV, 1864
- in *Delphinium*, XIII, 949, 951
- in dodder, latent, and effect on sugar beet, XIV, 1213
- and the electron microscope, XIII, (1265)
- electrophoretic studies with, XV, (598)
- in fig, XV, 93
- fungus association in beans, XIV, 1788
- in geranium, XI, 825
- heat as possible cure for, XII, 849
- in hop, see Hop diseases
- in *Hyoscyamus niger*, XV, 176
- inactivation by various agencies, XIII, 96; XIV, (161), 703; XV, 544
- infection, metabolic phenomena associated with, XIII, 1260
- in iridaceous plants, XIV, 1816
- isolation and crystallization, XII, (1306)
- in kok saghyz, yellows, XV, 190
- in larkspur, XIII, 951
- in lettuce, see Lettuce
- in lilies, see Lily
- in lovage, XIV, 1710
- in man, animal and plant, XIV, 2010
- in manila hemp, XI, 185, (1365)
- manual on plant, XIV, 947

Virus(es) (continued)—

- mitochondria, possible evolution from, XIV, (161)
 - movement in plants, XII, 1304; XIV, 571
 - names used in *Review of Applied Mycology*, XIV, (1184)
 - narcissus, XIII, 540, 954, 1460
 - the nature of, XIII, 423
 - nomenclature, XI, 422; XII, 846, 847; XIV, (1184)
 - in onion, see Onion
 - in papaw, XIV, 1450
 - in passion fruit, woodiness, XI, 534; XV, 547
 - in pea, XV, 1846
 - peach, see Peach
 - in pear, stony pit, XV, 92
 - in pepper, see Pepper (*Capsicum* spp.)
 - in pineapple, yellow spot, XIII, 1029
 - in *Pistacia vera*, XIV, 1126
 - plant, survey of knowledge, XV, 542, 543
 - in pomegranate, XV, 94
 - potato, see Potato
 - in prune, see Prune
 - in *Prunus*, XI, 1158; XII, 435
 - in raspberry, see Raspberry
 - respiration and, XIII, (1265)
 - in roots of plants, XI, 1214
 - rose, XI, 823; XIII, 239, (297)
 - rough bark, in fruit trees, XIII, 98
 - salicylate affects, XI, (75)
 - sizes of plant, XI, 74
 - Soviet studies in, XIV, 1122
 - in spinach, XIV, 247
 - in squash, mosaic, XIV, 1754
 - in stigma secretion of virus-affected plants, XIV, (635)
 - in stone fruit, see Stone fruits
 - in strawberry, see Strawberry
 - sugar beet, XIII, (231); XIV, 1213; XV, (227)
 - suppression of one by another virus, XV, (1185)
 - sweet potato, XV, 267
 - symptoms and leaf diagnosis, XII, 512
 - in tea, see Tea, phloem necrosis
 - tests, use of carborundum as abrasive in, XIV, (1662)
 - in tobacco, see Tobacco
 - in tomato, see Tomato
 - transmission—
 - by aphid and other insects, XI, 185, 243, (441), 644, 1284, (1365); XII, 115, 116, 243, (982), 1305; XIII, 100, (1358), 1433; XIV, 1754; XV, 545-547
 - by dodder, XI, 1213; XII, 849; XIV, 1128; XV, 548
 - by seed, XIV, 1754; XV, (758)
 - techniques, XII, 848
 - and transpiration, XV, 730
 - of Trinidad, plant, XIV, 869
 - in tulip, XII, 198; XV, 242
 - ultra-, the nature of, XIV, 126
 - vectors, see transmission
 - viroplasm theory, XII, 1303
 - yellows type, spread in the field, XIII, (101)
- Vitamin(s), see also particular vitamins, Riboflavin, etc.—
- in agricultural products, how to increase, XIV, (926)
 - from the air? XV, 963
 - in beer, XIV, 966; XV, (2059)k
 - in cabbage, see Cabbage
 - cellular functions of, XIV, 1025

SUBJECT INDEX

Vitamin(s) (*continued*)—

- cooking affects, **XI**, 1001, 1002, 1498; **XIII**, 636, 641-643; **XV**, 886
 - deficiencies of filamentous fungi, **XIII**, 17
 - in dehydrated—
 - fruits and vegetables, **XV**, 1327
 - seeds and sprouts, **XIII**, 1582
 - dehydration affects, **XIII**, 645; **XIV**, 1405
 - in drugs, **XV**, (227)
 - as fertilizers, **XII**, 1193
 - folic acid, **XIV**, 1406
 - in food, **XV**, 878
 - in fruits, **XII**, 289, 290, 1133; **XIII**, 645, 1578
 - in fungi, **XIII**, 17, 18
 - grass a source of, **XII**, 1135
 - in Macadamia nut, **XII**, 704
 - orchid growth affected by, **XIII**, 952
 - plants and, a review, **XIII**, 1624
 - in plants and soil fertility, **XV**, 1679
 - processing affects, *see also* dehydration, **XI**, 285; **XII**, 293, (1142); **XIII**, 330, 1069; **XIV**, 642, 926; **XV**, 879, 2079
 - provitamin A (carotenoid)—
 - determination, **XII**, 1555
 - in peaches affected by processing, **XIII**, 321
 - in vegetables, **XIV**, 1959
 - relation to growth, fruit drop and colour **XII**, 754
 - research, reviews on **XI**, 1490; **XIII**, 1624
 - in rose hips, *see* Rose hips
 - in sea buckthorn berry, **XIV**, 1403
 - in stored fruits and vegetables, **XIV**, 937
 - in tomato, *see* Tomato
 - in tropical horticultural crops, **XI**, 1028
 - in tubers, **XIII**, 1579
 - variation due to variety and sunlight, **XIV**, 1329
 - in vegetables, *see* Vegetables
 - in water melon, **XI**, 1248
- Vitamin A—**
- in carrots, fresh and dehydrated, **XIII**, 330
 - determination, **XII**, (708); **XIV**, (1431)
 - in fruits, **XI**, (1506)
 - in peas, frozen pack, **XI**, 287-289
 - processing affects, **XIII**, 330
 - in sweet potato, **XI**, 163
 - value of carotene in vegetables, **XII**, 292
 - in vegetables, *see* Vegetables
- Vitamin B, *see also* Thiamin**
- Vitamin B—**
- components, new, **XIV**, (1431)
 - Fusaria* a source of, **XV**, 2026
 - in grape juice and wine, **XI**, 296
 - as growth substance, *see* Growth substances, vitamin B
 - sources, **XV**, 1329
 - use at transplanting, **XI**, 1256
- Vitamin B₁—**
- accumulation by yeast cells, **XV**, (34)
 - in beans, **XI**, 121, 1498
 - in fertilizers, **XII**, 819, 1194
 - flowering plants affected by, **XI**, 6
 - germination of *Cattleya* orchid influenced by, **XV**, 1188
 - in groundnuts, **XII**, 232
 - in peas, frozen pack, **XI**, 288
 - in potato, **XIII**, 643
 - and tomato, *see* Tomato
 - and pollen growth, **XII**, 346
 - in vegetables, *see* Vegetables
- Vitamin B₂**, determination, **XIV**, 925
- Vitamin B₆**, **XII**, (180)

Vitamin C, *see also* Ascorbic acid—

- in *Actinidia chinensis*, **XIII**, 70; **XIV**, 406
- addition to apple juice, **XII**, 1552; **XIII**, 1073, (1087)
- in Alberta
 - diets, **XIII**, 320
 - wild fruits, **XIV**, 1394
- in apple, *see* Apple
- in Arctic plants, **XV**, 2019
- in asparagus, *see* Asparagus
- in banana, **XI**, 242; **XIV**, 370
- in beans, **XI**, 284; **XIII**, 1048; **XIV**, 1965; **XV**, (1185)
- in beet, cooked, garden, **XV**, 886
- in black currant, **XI**, 992; **XV**, 2018
- in cabbage, *see* Cabbage
- in canned fruits and vegetables, **XIII**, 324, 1610
- canning and cooking affect, **XI**, 1001
- in *Capsicum* fruits, **XIV**, 1964
- in cassava, **XI**, 551
- in citrus fruit processing residue, **XV**, 1312
- in citrus juice, *see* Citrus juice
- in conifer needles, **XIV**, 1401
- cooking affects, **XI**, 1002; **XIII**, 320; **XV**, 886
- cowpea seedling, relation to cell size in, **XII**, (18)
- determination and extraction, **XII**, 291, (295), 699, 700; **XIV**, 921; **XV**, 882, (1336), (2060)c, d
- drying affects, **XII**, 685
- environment of plant affects, **XIII**, 905
- in excised tomato roots, synthesis, **XIII**, 206
- in frozen grape juice, **XI**, 996
- in fruit juices and concentrates, **XV**, 327
- in fruits, **XI**, 281, 282, 1000, 1493; **XIII**, 319, 320, 324, 636, 1577, 1610; **XIV**, 1394; **XV**, 322
- in German iris, **XIV**, 1400
- in grape juice, **XII**, (1142)
- in grapefruit, **XI**, 268; **XII**, 994; **XV**, 782
- in guava, *see* Guava
- in Indian gooseberry (*Phyllanthus emblica*), **XIV**, 1398
- in juices of fruit and vegetables, **XI**, 1493
- in kaki, **XI**, (291)
- from kohlrabi, **XII**, 702
- in lima beans, **XIV**, (2003)
- in lime juice, **XIV**, 401
- liming, manuring and mineral nutrition affect, **XI**, 784; **XII**, 1432; **XIII**, 905
- mountain ash a source of, **XV**, 46
- in muscadine grapes, **XIII**, 86
- in nasturtium (*Tropaeolum majus*), **XIV**, 1399
- in onion, **XII**, 703
- in oranges, *see* Orange
- naphthoxyacetic acid fumigation affects, **XIII**, 522
- oxidase from cucumber, **XII**, (295)
- in paprika, *see also* in *Capsicum*, **XIV**, 696
- parsley a rich source of, **XII**, 1448
- in parsnip, **XI**, 105
- in peas, **XIII**, 301; **XV**, 1331
- in pears, **XI**, 1451
- in persimmon leaves and fruits, **XIII**, 639
- from pine needles, **XIII**, 703
- plants—
 - in Northern Russia, **XIV**, 1395
 - in Pamir, **XIV**, 1397
- in plants, possible factors affecting, **XI**, 1068; **XIII**, 15
- polyploidy in *Rosa* and, **XII**, 1452

SUBJECT INDEX

Vitamin C (continued)—

- potassium iodide affects, **XII**, 1431
 - in potato, *see* Potato
 - processing affects, **XI**, 1001; **XII**, 685, (1142); **XIV**, 642
 - in raspberries, frozen pack, **XII**, 673
 - in rhubarb, **XIII**, 190
 - role of, in plant nutrition, **XIII**, 359
 - in *Rosa*, *see Rosa*
 - from rose hips, *see* Rose hips
 - in scarlet-berried elder, **XIV**, 1402
 - in small fruits, stability of, **XIII**, 1041
 - sources—
 - among canned products, **XV**, 1329
 - in U.S.S.R., **XV**, 884
 - in sprouting seeds, **XV**, 2020, 2021
 - storage—
 - affects, in apple, **XIV**, 1939; **XV**, 1302
 - atmosphere affects, in banana, **XIV**, 370
 - in stored spinach affected by CO₂, **XI**, 286
 - in strawberries, **XI**, 61; **XIII**, 774
 - in swedes, **XI**, 1003
 - in sweet potato, **XIV**, 1966
 - in tea, **XI**, 196, 559
 - thiourea as protective agent, **XIV**, 920
 - from *Thlaspi arvense*, **XIV**, 1236
 - in tomato, *see* Tomato
 - in turnip greens, cooking affects, **XI**, (291)
 - in vegetables—
 - dehydrated or dried, **XII**, 685; **XIII**, 319, 329, 1064; **XV**, 329
 - generally, **XI**, 281, 282, 1003, 1004, 1493; **XII**, 705; **XIII**, 319, 320, 637, 1064, 1581; **XIV**, 636, 637; **XV**, 322, 880, 883, 1314, 2022
 - in juice, **XIII**, 323
 - manuring affects, **XI**, 784
 - processing or cooking affects, **XI**, 290, 444, 1000-1002; **XII**, 1134, (1142); **XIII**, 320, 323, 324, 636, 1064, 1581, 1610; **XIV**, 637; **XV**, 326, 328, 881, 882
 - in walnuts, *see* Walnuts
 - in wine, **XIII**, 316
- Vitamins D₂ and D₃, colorimetric reactions, **XV**, (1336)
- Vitamin K and photosynthesis, **XV**, 396
- Vitamin P—
- in black currants, *see* Black currants
 - in fruits and fruit products, **XIV**, 1968; **XV**, 332
 - in fruits and vegetables, **XIII**, 1583
 - from lemons, **XI**, (1506)
 - in rose hips, **XIV**, 1968; **XV**, 332
- Vitaminol from tomato pulp, **XIII**, 1082
- Vitis*—
- rotundifolia*, *see* Vine, muscadine grape spp., *see* Vine

- Wädenswil horticultural Research Station Rep. 1935/37, 1938/39, 1940, 1941 and 1942, 1944, **XI**, 328; **XII**, 1162; **XIV**, 1451; **XV**, 944, 2079
- Wageningen School of Agriculture, **XII**, 722
- Waimea County, Nelson, N.Z., agriculture in, **XV**, 35
- Waite agric. Res. Inst.—
- A.R. 1939/40 and 1941/42, **XII**, 336; **XIV**, 1452
 - flax investigations at, **XI**, 1231; **XIV**, 1452
- Walcheren, fruitgrowing reminiscences, **XV**, 1414
- Wales, vegetable growing in, **XV**, 1075

Walled fruit garden at East Malling, **XV**, 1418

- Walnut—
- aphid, *Chromaphis juglandicola*, **XV**, 1600
 - bacterial blight (*Pseudomonas (Phytomonas) juglandis*), **XI**, 1162; **XIV**, 1598
 - black (*J. nigra*)—
 - apples, potatoes and tomatoes do not thrive in vicinity of, **XIII**, 1637
 - evaluation of nuts of, **XIII**, 1229
 - growth measurements of seedlings of, **XIII**, 787
 - as pasture tree, **XII**, 735
 - toxicity to plant growth, **XIII**, 1637; **XV**, 1817
 - blight, **XIV**, 575; **XV**, (597)
 - boron for, **XV**, 941
 - crown rot (*Phytophthora citrophthora*), **XIV**, 585
 - datanā (*Datana integerrima*), **XI**, 1195
 - flowering, **XI**, 1144; **XV**, 1535b
 - forests in Kirgizia, vegetation of, **XV**, 1531
 - as forest tree, **XV**, 522
 - grafting, **XIII**, 415; **XIV**, 112, (1567)
 - growing—
 - basin method, **XV**, 1017
 - in England, **XIII**, 786
 - on eroded slopes, **XV**, 1017
 - in Switzerland, promotion of, **XIV**, 545; **XV**, 522
 - in Tasmania, **XV**, 1530
 - in tropics and sub-tropics, **XII**, 575
 - growth: nut ratio in Persian, **XIV**, 1562
 - hardy, the Crath, **XIII**, 1228
 - Howard Spence's work on, **XI**, 1040
 - kernels, delayed hulling affects quality, **XIII**, 1235
 - layers, wiring, **XII**, 1280
 - manganese deficiency in, **XII**, 105
 - mulching, **XIV**, 1563
 - mycorrhizas of, **XIV**, 1104
 - nut weight and kernel percentage of black, **XI**, 741
 - pollination, **XV**, (1535)b
 - productivity and flowering in Kazakhstan, **XIV**, 544
 - pruning, **XIV**, 546
 - rootstocks, **XI**, 385; **XII**, 415
 - selection in Switzerland, **XV**, 2079
 - soil management for, **XIII**, 58
 - storage pretreatment, **XIV**, 374
 - surface areas of Persian, **XIII**, 1230
 - varieties—
 - Crath's Carpathian, **XIII**, 1228
 - Franquette × Parisienne, **XIV**, 1562
 - vegetative propagation, **XII**, 415, 1280; **XIII**, 415; **XIV**, 112, (1567)
 - vitamin C in, **XII**, 1282; **XIII**, 640, 1580; **XIV**, 407-409; **XV**, 323, 884
 - wilt of tomato, **XV**, 1817
- Warm—
- weather, effect on winter-hardened condition of plant, **XI**, 360
 - winter effects on stone fruits, **XII**, 1239
- Warmth, total required to produce fruiting, **XI**, 393, 1107
- Wartime horticulture in England, **XIV**, 1439
- Washington—
- agric. Exp. Stat. A.R. 1938/39, 1939/40, 1941/42, 1940/41, 1943/44 and 1942/43, **XI**, 1051, 1052; **XIII**, 671, 1098; **XV**, 945, (1366)
 - fruit regions in, **XII**, 788

SUBJECT INDEX

- Wasmannia auropunctata*, XV, 1898
- Waste—
land cultivation in Spain, XV, (1018)
materials, nitrogen content, XIII, 394
- Water—
absorption—
active, and transpiration, XV, 1385
at low temperatures, XIII, 353
osmotic concentration, XIV, 443
in root hairs, measurement, XIV, 442
availability—
in deserts, XIV, 1119
root growth and, XI, (695)
balance in desert plants, XV, 400
conservation, orchard, XIV, 1517, 1519
consumption of economic plants, XIII, (706)
culture(s), *see also* Sand culture, Soilless cultivation—
in activated sludge tank, XI, 673
aeration, XI, 810
carnations grown in, XIV, 825-827
of cucumbers, XV, 1796
equipment, XI, 665
fertilizers for, XIII, 395
of greenhouse crops, XV, 1693
for investigation of plant nutrition, XIV, 1011
pH affects success in, XIII, 204, 205
review of progress in, XI, 672; XII, 730
tomato, *see* Tomato
determination in dried foodstuffs, XV, 1324
fungi, XIV, 2004
hyacinth (*Eichhornia*)—
in California, XIII, 835
propagation by seed, XI, 183
as source of compost, XI, 907
intake by roots, XI, (380)
lift, an improved, XV, 815
-logging affects photosynthesis in apple, XIII, 55
melon, *see* Melon
pipe discharge measurement, XV, 10
plants in Manchuria, XI, (1092)
purification by ion-exchange resins, XV, 419
relations—
in plant cells, XI, (380)
to plant growth, XIII, 680
supply—
plants and their, XIII, 1192
to transpiring leaves, XIII, 354
vapour, growing plants in, XIII, 27
- Watering—
automatic, XI, (380), 1100
excess, effect on tomato and potato, XV, 207
pot plants, XV, 1088
- Wattle (*Acacia* spp.)—
diseases, XI, 906
growing in Natal and Kenya, XI, 543
planting, XI, 905
in S. Africa, story of, XII, 1170
- Wax—
beans, blossom drop reduced by growth substances, XIV, (547)
coatings, respiratory gas movement through, XIII, 309
- Waxing fruit and vegetables for preservation, *see* Storage dips
- Weather—
affects—
flowering and fruit set, XIII, 743
fruit yields, XIV, 463
vitamin content in strawberries, XIII, 774
- Weather (*continued*)—
conditions at East Malling 1943 and 1944, XIV, (1476); XV, 1396
injuries to fruit, *see also* particular causes, XIV, 1114, 1578, 1579
methods of computing a regression of yield on, XIV, (19)
regions in England and Wales, XV, 1394
- Weeds—
bindweed, *see* *Convolvulus*
blackberry or bramble as, XIV, 1636; XV, 580
bracken, *see* Bracken
in carrots, *see* Carrot
Centaurea picris, XIV, 1163
of Colorado, XII, 1329
control, *see also* Sprays and spraying, herbicides, and under particular crops—
biological, XII, 1146; XIV, 610; XV, 369, 372
chloropicrin for, XIV, 1683
by fertilizers, in compost, XIV, 1635
by flame throwers, XIV, 242, 1678; XV, 111
in flax, Sinox, XIV, 1689
manual, XIII, 659
pH of soil and, XII, 1332
survey of methods, XIV, 1633; XV, 1700
in vegetables, *see* Vegetables
in Washington orchards, XIV, 607
Convolvulus arvensis, XII, 469; XIII, 692, (836); XIV, 180, 609; XV, (128), 1102
corn marigold (*Chrysanthemum segetum*), XIII, 865
dogbane (*Apocynum cannabinum*), XIV, 1634
Emilia scabra, virus of, XII, 241
fat hen (*Chenopodium album*), XV, 115
Galinsoga parviflora, XIII, 865
in Great Britain, wild flowers and, XIV, 1435
Gonolobus laevis, XV, (1185)
as hosts of *Botrytis cinerea*, XII, 1312
investigations in Australia, XIII, 1630
of Iowa and control, XV, 110
in Kansas, XV, (431)
Lantana, insect control of, XV, 1348
Lepidium draba, XIV, 611, (635)
of Michigan, XII, 882
of New Jersey, XIV, (1662)
of N. Zealand, XIV, 606
nut grass (*Cyperus rotundus*), XIII, 582
parasitic, *Loranthus*, XV, 1239
poison ivy control (*Rhus toxicodendron*), XII, 883
prickly pear, *see* Prickly pear
problems in Yakima Valley, XV, (1658)
ragweed (*Ambrosia* sp.), XV, 1701
ragwort (*Senecio jacobaea*) control, XV, 114
a review of the problem, XII, 881; XIV, 1633
seed control by boron, XV, 112
seeds, viability of, XI, (248); XIV, 180
skeleton weed (*Chondrilla juncea*), XII, (1333)
St. Johns wort (*Hypericum perforatum*)
entomological control, XIV, 610, 1161; XV, 369, 372, 1348
of tea, *see* Tea
tiger pear (*Opuntia aurantiaca*), XV, 1052
wild onion—
(*Allium vineale*), XIV, 1162
(*Northoscordum fragrans*) control, XV, 1704
- Weevils, British brown and green, leaf, (*Phyllobius* spp.), XI, 765
- Wega mulch, a soil mulch, XII, 1204
- Weight of plant, fluctuations in, XIII, 1119

SUBJECT INDEX

- West African—
 Agricultural Officers, Proceedings of 3rd Conference 1938, vol. 2, **XI**, 329
 Commission, Report I on Crop production and soil fertility problems, **XIV**, 1442
- West Indies, agriculture in, **XII**, 1145
- West Java Research Station, work of, **XII**, 251, 619
- West Virginia agric. Exp. Stat. Rep. 1938/40-1940/42, **XIII**, 346, 1637
- Western Nut Growers Association A.R. 1943, **XV**, 941
- White washing
 sugar beet plants to increase yield, **XV**, 147
 trees to prevent sunburn, **XII**, 433, 1071
- Wild flowers and weeds of Great Britain, **XIV**, 1435
- Willow
 beetle, brassy (*Phyllodecta vitellinae*), **XIV**, (1662)
 herb, rose bay, *Epilobium angustifolium*, prevalence on bombed sites, **XIII**, 350
 seven British *Salix* spp., **XV**, 230
 for tanning, **XIV**, 974, 1297
 the weeping, as fodder tree, **XI**, 683
- Wind—
 break, *see also* Shelter trees—
 for citrus, **XII**, 213, 560
 effects, **XIV**, 432
 for fruit, **XI**, 222; **XII**, 1071; **XIV**, 1121
 in general, **XI**, 1156
 for prairie farms, **XV**, (1493)c
 damage to apples on selected rootstocks, **XI**, 750
 erosion, **XI**, (695)
 erosiveness measurement, **XIII**, (31)
 indicator, a recording, **XII**, 772
 katabatic, **XV**, 1554
 protection from drying, **XIV**, 316
- Windows, automatic opening in glasshouse, **XV**, 1691
- Wine—
 acid decomposition by bacteria in, **XIV**, (2003)
 ascorbic acid in apple, peach and Scuppernong wine, **XIII**, 316
 bibliography on, **XIII**, 661
 blackberry, detection of grape wine in, **XII**, (708)
 of Bordeaux, atlas of, **XIV**, 535
 browning, control, **XIV**, (2003); **XV**, (2059)w, (2060)g
 classification, **XV**, (2060)f
 differences possibly due to pruning, **XV**, 347
 disorders of, **XIV**, 939
 fruit—
 making—
 domestic, **XV**, (2059)p, q
 in Germany, **XIII**, 317
 sulphurous acid important in, **XV**, (2060)h
 in Switzerland, **XII**, 1162; **XV**, 944, (2060)i
 yeasts decomposed by bacteria in, **XV**, 2041
 glycerol in, **XIII**, (1620)
 honey, **XII**, 302
 investigations in Switzerland, **XIV**, 1441, 1451
 keeping quality, bottling and, **XI**, 621
 making—
 adsorbent earth used during, **XI**, 622
 in British Columbia in the home, **XIV**, 1413
 burnt gypsum used in, **XV**, 2040
 domestic, **XIV**, 1412, 1413
- Wine making (*continued*)—
 from grape residues, **XV**, 346
 in New Zealand, **XII**, 329
 in S. Africa in the home, **XIV**, 1412
 in Spain, **XV**, (1336)
 in Switzerland, **XV**, (2059)z
 yeasts used in, **XV**, (2059)r
 malic acid decomposition in, **XIV**, (1431)
 monochloroacetic acid in, **XIII**, (1620)
 musts, **XII**, (1142)
 pink, notes on, **XI**, 1463
 potassium metasulphite treatment affects colour, **XV**, (2060)b
 production—
 in Punjab, scope for, **XIII**, 1605
 in South America, **XIII**, 1604
 figures, Swiss, **XIII**, 1203
 in S. Africa, **XV**, 1362
 tasting tests, lessons of, **XV**, 2039
 vitamins B in, **XI**, 296
 yeast cultures, **XI**, 294; **XII**, 1119
- Winter—
 chilling a necessity for deciduous fruits, **XII**, 59-61; **XIV**, 64; **XV**, 37
 hardiness, *see also* Frost resistance—
 polyploidy and, **XIII**, 389
 injury, *see* Frost damage
- Wireworms (*Agriotes* spp.) and others—
 biology and control, **XIII**, 1366; **XIV**, (1184)
 control—
 by *carbon disulphide and formaldehyde carbon disulphide, **XIII**, 1575
 Cheshunt investigations, **XII**, 1575; **XIII**, 1346
 by dichloroethyl ether, **XIV**, 671
 by 1,1-dichloro-1-nitroethane, **XIII**, (1307)
 by dichloropropane-dichloropropylene, **XIV**, 1681
 in irrigated soil, **XI**, 694
 distribution in soil, **XIII**, 114
 in glasshouses, **XIII**, 145; **XV**, 373
 identification, **XIV**, 664
 (*Melanotus longulus*), **XIV**, (665)
 in England and Wales 1939-1942, a survey, **XV**, 136
 in New Zealand, **XII**, 916
 populations and effect on crop, **XI**, (1187)
 soil moisture relations, **XIII**, (947)
 symposium, **XII**, 915
 washing out from soil samples, **XIII**, 863
 in West of England, a survey, **XIV**, (1662)
- Wiring, *see also* Ringing by wiring—
 as aid to propagation, **XII**, 1280
- Wisconsin State Horticultural Society, 75 years' work of, **XIV**, 1453
- Wisley trials, rules governing, **XV**, 1072
- Witch hazel (*Hamamelis virginiana*), **XII**, 1583; **XV**, 268
- Woad farming in England, **XV**, 1127
- Wood—
 apple (*Feronia elephantum*) utilization, **XIV**, 1926
 boring beetles, **XV**, (599)
 delay in apple trees, **XII**, 419
 preservation methods, **XI**, 1087
 preservatives—
 affect growth of mushroom, **XIII**, 1452
 against termites, **XIV**, 868
 chemical, **XV**, 420
 poisonous to plants, **XIV**, 187
 waste, not good source of humus, **XII**, 1203
- Woolly aphid, *see* Aphis, woolly

SUBJECT INDEX

- Wormwood (*Artemisia absinthium*)—
 cultivation, XIV, 713
 as seed protectant, XII, 1367
 Wound healing in higher plants, XII, 12, 13
 Wraps for fruit, *see* Storage, wraps
 Wye College, amalgamation of Swanley College
 with, XV, 947
- X-ray, *see* Rays, X
- Xanthium*—
strumarium, oil from, XII, 1404
 translocation of floral stimulus in, XIII, 682
- Xanthomonas*—
phaseoli associated with *Marmor phaseoli* in
 bean, XIV, 1788
pruni, XIV, 1133; XV, 1570
taraxaci, XIV, 228
- Xanthone as pest control spray, XIII, 1287; XIV,
 1625
- Xanthophyll determination in plants, XIV, 1971
- Xanthorrhoea* resin, XV, 192
- Xanthosoma sagittifolium*, root rot of, XI, 190
- Xerocomus* sp. in Palestine, XII, (1450)
- Xeromorphic characters, effect of nutrients on,
 XIV, 1686
- Xerophytes from the Altai, XV, 237
- Xylaria mali*, XIII, 106; XV, 560, 561, (598), 1030
- Xyleborus fornicatus*, *see* Tea, shot-hole borer
- Xylem formation from ring grafts, XIV, (1545)
- Xylenoxy acids, as growth substances, XIV, 1003
- Xylotrechus quadripes*, XI, 205; XII, 626; XIV,
 1346
- Yakima Valley—
 fruitgrowing in, XIII, 35
 hop growing in, XIII, 161
- Yam—
 bean—
 (*Pachyrhizus erosus*) as source of insecticide,
 XIII, 1328; XIV, 1657; XV, 939, 1238
 (*Pachyrhizus palmatilobus*), cultivation,
 XIV, 1907
 (*Pachyrhizus* spp.), botanical study of,
 XV, 1954
 composition in Ceylon, XIII, 587
 growing in New Guinea, XI, 552
 manuring, XI, 1367; XV, 2072
- Yearbook U.S. Dep. Agric. 1940-1942, XII, 314;
 XIII, 338, (347)
- Yeast(s), *see also* *Torula*—
 cells, vitamin B₁ accumulation by, XV, (34)
 culture and identification, XIV, 1434
 cultures, wine, XI, 294; XII, 1119
 decomposed by bacteria in fruit wines, XV,
 2041
 in dessert wines, XIV, (2003)
 extract breaks rest period of buds, XI, 344;
 XII, 6
 as growth stimulant in mangosteen, XI, 589
 hop, XV, 646
 multiplication affects apple juice, XIII, 314
 naphthalene derivatives affect, XIV, 455
 preparation for food of brewers', XIV, 1999
 production and nutritive value, XV, 2029
 for tobacco fermentation, XV, 355
 virus inactivator from, XIII, 96
- Yellow mombin (*Spondias mombin*), XII, 648
- Yerba maté (*Ilex* spp.), *see* Maté
- Yew scale (*Lecanium corni-crudum*), XIV, 1815
- Yezabura pyri* aphid on pear, XV, 104
- Yield—
 increased by spraying with growth substances
 at flowering time, XIV, 1535
 regression, effect of weather on, XIV, (19)
- Yucca propagation, XIV, 335
- Yuquilla (*Manihot carthaginensis*), an oil plant, XV,
 268
- Zanzibar—
 Dep. Agric. A.R. 1940-1943, XI, 1053; XII,
 1163; XIV, 425, 2028
 experiment station at Kizimbani, XIV, 1454
 food production during war, XV, 811
- Zeiss hand sugar refractometer, XI, (416)
- Zieroma caerulea* parasite of Colorado beetle, XV,
 1707
- Zinc—
 accumulation in soil, XI, 24
 and auxin relationship, XI, 332
 content of certain plants, XIV, 1029
 deficiencies—
 in apricot, XI, 421
 in avocado, XI, 882
 cells of vegetative buds affected by, XI, 421
 in cherry, XV, 1544
 in citrus, XII, 999, 1468; XIV, 1575; XV,
 791, 1202, 1204
 in fruit trees, XIII, 1246, 1247; XIV, 563,
 1575, 1576; XV, 535
 little leaf due to, XI, 421, 753, 948, 1149;
 XIII, 1246; XIV, 563, 1575, 1576; XV,
 534, 535, 930, 1548
 in mango, XI, 948
 in peach, XI, 421, 753, 1149; XIII, 1246;
 XIV, 563, 1576
 in peas, XIV, 1799
 in pecans, XV, 534, 930
 in pineapple, XIII, 295, 1632
 in raspberry, XV, 508
 rosette due to, *see* little leaf
 in vine, XII, 1299; XIII, 1246; XIV, 1575,
 1576
 determination—
 in fertilizers, XII, 27
 in soil, XII, (1195)
 effect on enzyme activity in tomato, XIV, 1276
 as fertilizer in spray form, XI, 863
 flax needs, XIV, 1687
 fungicidal action, XII, (138)
 in plants, report on, XI, (1092)
 and seed production, XII, 1353
 in soil, extraction by plants, XIV, (458)
 in soya bean nutrition, XIV, 804
 sulphate effect on plants, XI, 687
- Zinnia—
Alternaria disease, XII, 1458
 in Indiana, XV, (1865)c
- Zizyphus jujuba*, *see* Jujube
- Zwetschen—
 cultivation, a German bulletin, XIII, (45)
 pollination, XI, 391
 variety Zimmers Frühzwetschge, XV, 44
- Zymasis in apples, XII, 1099
- Zythia fragariae*, probably = *Phyllosticta grandil-*
maculans, *see* Strawberry leaf blotch

AUTHOR INDEX

Brackets. A bracket round a name signifies that the person or body indicated, though not cited as the author, inspired, or was in some measure responsible for, the article noted. A bracket round a number indicates that the article in question was noted but not abstracted. As from Vol. XV, No. 4 inclusive, such numbers are sub-divided alphabetically.

Slavonic names. A very slightly modified form of the Damiani system of transliteration was adopted by the Bureau in 1944. The following steps have been taken to avoid tiresome repetition and to facilitate the finding of names:—where a Slavonic name is cited in this index in accordance with the rules of any system other than the Damiani and the first two letters in it do not both correspond with the first two letters of the name transliterated according to Damiani rules, the name is given also in its "Damiani" form. Where the difference occurs further on in the name, the reader is asked to be patient and use his mother wit. It will be found that in some instances the name cited in the index does not exactly correspond with that used in the original abstract.

- Aamodt, O. S., XIV, 166
 van Aartsen, J. P., XIV, (19)
 Abashkin, V. K., XIV, 841
 Abbiss, H. W., XIV, 1192, (1312)
 Abbott, C. E., XV, 1648
 Abdul Hamid, XIII, 1045
 Aberdeen, J. E. C., XV, 1816
 Åberg, B., XV, 394
 Åberg, E., XIV, (1030)
 Acerete (Lavilla), A., XI, 512,
 844, 845; XII, 991, 1008;
 XV, 1205
 Achard, E. D., XIV, 1621
 Acharya, C. N., XI, (248);
 XIV, (1030)
 Ackerman, W. T., XIII, 172
 Acree, F., Jr., XIV, 1183, (1431)
 Acuña, J. B., XV, 1243, 1244,
 1245
 Adam, D. B., XIV, 1687
 Adam, W. B., XI, 1001, 1470,
 1475; XII, 1542; XIII, 307,
 324, 325, 326, 1257, 1610,
 (1620); XV, 1020, 1330, 1331,
 (1336)
 Adames, G. E., XIV, 355
 Adametz, L., XII, 432
 Adams, A. B., XIV, 814
 Adamson, A. M., XI, 549
 Adamson, R. M., XIII, 928
 Addicott, F. T., XI, (1067);
 XIII, 675; XIV, (1803); XV,
 182, 668, 1747
 Adler, R., XI, 357
 Adsuar, J., XIII, (1032); XV,
 1992
 Aeppli, D. C., XI, 902
 Afanas'ev, L. I., XIV, 253
 Afanasiev, M., XV, 49
 Agnew, G. W. J., XII, 1088
 Agricultural Research Council,
 London, XII, 1571
 Aguilar, G. J. I., XIV, 1919
 Alhberg, O., XIII, 832, 920, 948,
 1295, 1405; XIV, 141, 241,
 548, 1173; XV, 194
 Ahmad, S., XIV, 1716
 Ainsworth, G. C., XIII, 1621
 Aikman, J. M., XV, 1017
 Airan, J. W., XV, 360
 Aitken, H. C., XII, 395, 396, 1552
 Aitken, Y., XV, (1852)a
 Aiyappa, K. M., XV, 1208
 Aiyer, A. K. Y. N., XI, 569;
 XV, 1337
 Akamine, E., XI, 186
 Akamine, E. K., XIV, 328, 333
 Akau, G., XII, 303
 Akenhead, D., XI, 1510
 Akman, A., XIV, 1557
 Akseljirod, D., XV, 676
 Alban, E. K., XIV, 1970
 Albanese, A. A., XV, (1336)
 Albany, Ca, Western Regional
 Research Laboratory, XIV,
 (945); XV, (911)
 Albaum, H. G., XI, (347)
 Alben, A. O., XIII, 1249; XV,
 534
 Albignac, W. A., XIII, 958
 Albrecht, H. R., XIV, (290)
 Albrecht, W. A., XI, (689);
 XII, 21, (752), 1386; XIII,
 (697), (1182); XV, 1679
 Alcaraz Mira, E., XV, 1717
 Aldebert, P., XV, 1036
 Alderman, D. C., XIV, 1980;
 XV, 2032
 Alderton, G., XV, (2059)b
 Aldrich, D. G., XV, 786, (1406)a
 Aldrich, W. W., XII, 230; XIII,
 1465, 1495; XV, 541
 Aleem, S. A., XIII, 1007
 Aleksandrov, V. G., XV, 15
 Alekseeva, T. S., XV, 157
 Alemar, C., Jr., XIV, 1908
 Alencar, J., XIII, 103
 de Alencar, J., XIII, 973
 "Alert", XII, 972
 Alexander, C. C., XV, 1050
 Alexander, F. A., XIV, 1210
 Alexander, L. J., XIII, (219);
 XV, 1173
 Alexander, O. R., XIV, 411
 Alexander, P., XIII, 635; XIV,
 1647
 Alexander, T. R., XII, 1426
 Alekseeva, *see* Alekseeva
 Algazin, U. S., XV, 237
 Algemeen Landbouw Syndicaat,
 Dutch East Indies, XII, 319
 Algérie, Inspection Générale de
 l'Agriculture, XV, (1006),
 1194
 Ali, C. N., XV, 1871
 Alibert, H., XV, 1985
 Alimbekova, M. G., XV, 1822
 Allan, R. G., XII, 1073, 1079;
 XIII, 542
 Allard, H. A., XI, 21, 1236; XII,
 17; XIV, 684, 1784
 Allen, E. F., XI, 189
 Allen, F. E., XII, 940
 Allen, F. W., XII, 1524; XIII,
 1193; XIV, 1944, 1955
 Allen, H. R., XIV, (1030)
 Allen, H. W., XIV, 1159, 1629;
 XV, (1658)a
 Allen, L. A., XIV, 669
 Allen, N., XI, (821)
 Allen, P. B., XII, 451
 Allen, R. C., XII, 543; XIV, 293,
 295
 Allen, R. J. L., XIV, 934; XV,
 329
 Allen, T. C., XIV, (547)
 Allinger, H. W., XI, 409; XII,
 1129
 Allison, F. E., XI, 367
 Allison, J. R., XI, 1335; XII, 220,
 566
 Allison, R. V., XV, (505)
 Allman, S. L., XI, 585, 1189
 Allmendinger, D. F., XII, 809;
 XIII, 1200, 1244; XIV, 62,
 1481; XV, 1634
 Alnnutt, R. B., XI, 200; XIII, 632
 Allo, A. V., XIII, 508
 Allwright, W. J. S., XV, 1338
 Allyn, R. B., XI, 691
 de Almeida, F. J., XI, 1341; XIV,
 1061, (1063), 1111
 (Alnarp, State Experiment
 Station for Vegetables), XIII,
 1090
 Alpaugh, G. N., XV, 872
 Alsac, N., XIV, 439
 van Alstyne, A., XI, 769
 Alten, F., XI, 124
 Altman, R. F. A., XII, 304, 305,
 306
 Altstatt, G. E., XIII, 1403; XV,
 1766
 Altuhov, M., XV, 672
 Alvarado, J. A., XV, 836
 D'Alvarenga, R. S. V., XIII, 1468

AUTHOR INDEX

- Alvarez, A. S., XI, (641)
 Alvarez Garcia, L. A., XV, 1992, (1995)a
 Aman, J., XIII, 1046
 Amani, East African Research Station, XI, 325; XII, 320, 604, (1584); XIII, 573
 Ambarcumjan, M. A., XIII, 742
 Ambrose, A. M., XII, 1341
 American Chemical Society), XIII, 1182
 American Phytopathological Society, XI, (650); XII, (1164); XIV, 547; XV, 596, 597, 598
 American Society of Agronomy, XI, 1015
 American Society of Plant Physiologists, XII, (1638)
 Amerine, M. A., XI, 1463, 1464; XII, 1278; XIII, (1620); XIV, (412), 536
 Amlong, H. U., XII, 343; XIV, 775; XV, 421, 636
 Ammal, E. K. J., XV, 2065
 Ammen, H. J., XIII, 1488
 Amolak Ram, XI, 142, 238
 Amos, J., XII, 1272
 Amrute, P. V., XIII, 1086
 Amstein, W. G., XIV, 258
 Anand Institute of Agriculture, XIV, 951, (968); XV, (1366)
 Anan'eva, *see* Ananjeva
 Ananjeva, S. V., XII, 763; XV, 1732
 Anantanarayanan, K. P., XI, 954
 Anantha Rao, N. K., XIII, 1130
 Andersen, E. M., XV, 1663
 Anderson, A., XV, 1782
 Anderson, A. J., XV, 2, 3
 Anderson, C., XI, 84
 Anderson, D. B., XI, 642
 Anderson, E. E., XIII, 1453
 Anderson, E. J., XV, (598)
 Anderson, G. W., XV, 354
 Anderson, H. W., XI, 462, 738; XIII, 95, 186, 1282
 Anderson, J. A., XIV, 704
 Anderson, L. C., XIV, 72
 Anderson, L. D., XIII, 473, 1350, 1451; XIV, 1781, 1782
 Anderson, M. S., XII, 1192; XIII, 21
 Anderson, R. C., XI, 769
 Anderson, T. F., XI, (1287)
 Anderson, W. S., XII, 570
 Anderssen, E. E., XIV, 853
 Andrae, W. A., XIII, 1073; XV, 2021
 Andreev, V. N., XIII, 708, 751
 Andr  n, F., XIII, 1377; XIV, 375
 Andrews, W. B., XIII, 945
 Andriske, A., XV, 339
 Androsova, M., XIII, 1414
 Androsova, M. P., XI, 1257
 Andrus, C. F., XIII, (219); XV, 737, (758), 1174
 Anet, H., XI, 68
 Angell, H. R., XV, 1710
 Angelo, E., XIII, 1488
 Angelo, J. S., XV, (758)
 d'Angremont, A., XI, 940
 Anliker, J., XV, 1519
 Annand, P. N., XIV, 1654
 Annual Reviews Inc., XIII, 1629
 Anon., XI, 9, 49, 54, 70, 85, 91, 112, 126, 152, 210, 228, 251, 278, 294, 306, 313, 315, 354, 399, 431, 438, 442, 465, 472, 534, 535, 590, 592, 597, 600, 603, 639, 894, 978, 985, 1010, 1088, 1115, 1147, 1184, 1209, 1275, 1306, 1357, 1429, 1432, 1450, 1462, 1480, 1503, 1505; XII, 35, 40, 141, 142, 162, 225, 257, 287, 364, 486, 488, 502, 586, 608, 643, 661, 664, 668, 677, 681, 706, 717, 724, 727, 863, 884, 960, 1023, 1044, 1070, 1105, 1114, 1123, 1165, 1219, 1352, 1363; XIII, 93, 127, 144, 146, 149, 177, 268, 302, 379, 507, 621, 649, (706), 709, 715, 752, 791, 792, (845), (877), 878, 902, 1003, 1018, 1024, 1050, 1061, 1063, 1082, (1087), 1144, 1158, 1179, 1189, 1203, 1501, 1520, 1521, 1596, 1611, 1619; XIV, 3, 28, 50, 58, 147, 149, 152, 159, 163, 195, 196, 203, 204, 208, 211, 212, 221, 256, 276, 280, 298, 301, 303, 310, 320, 335, 336, 337, 346, 384, 385, 390, 391, 403, (528), 590, (641), 659, 668, 706, 707, 728, 751, 905, 1017, (1102), 1115, 1140, 1226, 1242, 1249, 1329, 1367, 1390, 1421, 1487, 1575, 1800, 1865, (1875), 1951, 1994; XV, 58, 250, 260, 301, 317, 338, 463, 604, 631, 682, 849, (911), 947, 1022, 1037, 1052, 1072, 1078, 1103, 1110, 1127, 1247, 1248, 1257, 1316, 1319, 1370, 1415, 1416, 1447, 1474, 1497, 1541, 1542, 1617, 1636, 1662, 1704, 1778, 1827, (1852)b, (1852)c, (1852)d, 1903, 1917, 1931, 1988, 1991, 1998, 2029, 2049
 Ansaloni, A., XI, 383, 712
 Ansari, A. R., XII, (659)
 Ansari, M. A. R., XV, 1894
 Antebi, S., XI, 892
 Anthony, R. D., XI, (737); XII, 63, 401; XIV, 71
 Antigua, Department of Agriculture, XI, (1054)
 Antill, R. M., XV, (1185)
 Antill, R. N., XIV, 1698
 Antonova, R. P., XIV, 288
 van Antwerpen, F. J., XII, 301
 Anzorena, P., XIV, (1083)
 Appel, O., XV, (599)
 Apple, J. W., XIII, 1349; XV, 1099
 Apple, S. B., XIII, 926; XV, (1852)e
 Appelman, C. O., XIII, (690); XIV, 915
 Appelman, D., XII, (587)
 Apresov, XII, 793
 April, N., XV, 474
 Apte, V. N., XI, (248)
 Aragone, L. A., XI, 996
 Arana, F. E., XI, 1485; XV, 1946
 Arant, F. S., XIII, 1322
 Arcyba  ev, D. D., XV, (245)
 Arengo-Jones, R. W., XI, 297, 975, 987
 Argentina, Ministry of Agriculture, XIII, (770), 1091; XV, (290), 417, (528), (534), (945), 1299
 Arhangel'skaja, T. I., XIV, 629
 Arig  s Villanueva, F., XIV, 205
 Arizona Experiment Station, XI, (1054); XIV, 1436
 Ark, P. A., XII, 117, (158); XIV, 1598, 1731, 1775; XV, (597), 705
 Arkansas Agricultural Experiment Station, XI, 1017; XV, 2071
 Armand, L. M., XIV, 353
 Armstrong, G. B., XIV, 1426
 Armstrong, J., XII, 709
 Armstrong, J. M., XIII, (33), 138
 Armstrong, T., XIII, 1324
 Armstrong, W. D., XII, 1256
 Arnason, A. P., XIV, 664
 Arnaud, G., XII, 860
 Arnold, C., XI, 1207
 Arnold, C. H., XIII, 1299, 1302
 Arnold, H. A., XV, 179
 Arnold, H. C., XI, 122, (131); XII, 132, 153, 184, 1481; XIII, (227); XIV, 155, 2027; XV, 1360
 Arnold, L. J., XI, (1506)
 Arnold, P. T. D., XI, 1504
 Arnon, D. I., XI, 478, (689); XIII, 204, 205, 1131, 1419; XIV, 1011
 Arny, A. C., XIV, 194
 Aroeira, J. S., XI, (821); XV, (505), 1433
 Aronoff, S., XII, 1555; XIV, 560
 Aronson, L., XII, 1563
 Arr  niz, C., XV, 1669
 Arruda, S. C., XV, 1743
 Arthur, J. J., XV, 637
 Arthur, J. M., XI, (1300); XV, 1062, (1658)v
 Artigala, J., XIV, 1165
 Asai, G. N., XIV, 293
 Asami, Y., XII, 78
 Asbury, S. E., XII, 819; XIII, 395
 Aschan, K., XIV, 487
 Asdonk, T., XII, 475
 Asenjo, C. F., XIII, (656); XV, 307
 Asham, L., XIII, 905
 Ashanti, Department of Agriculture, XV, 368
 Ashby, D. G., XIV, 726
 Ashby, M., XI, 819, 1281
 Ashdown, D., XIV, 1737
 Ashmore, S., XIII, 62, (182)
 Ashplant, H., XI, 214
 Ashworth, D., XIII, 461, 936; XIV, 1257
 Ashworth, M. R. F., XIII, 60
 Askew, H. O., XI, 71; XIV, 400, 562, 1700; XV, 88, 153, (758)

AUTHOR INDEX

- Asman, M. C., XII, 1504
 Assam, Department of Agriculture, XI, 1018; XII, (1584); XV, 276
 Association of Applied Biologists, XII, 915, (1347), 1397; XIII, (874), 1175
 Association of Official Agricultural Chemists, XI, 1511
 Association of Special Libraries and Information Bureaux, XI, 375; XIII, (351)
 Association for the Study of Systematics in Relation to General Biology, XII, 1561
 Asthana, R. P., XV, 295, 1288, 1289
 Asthana, S. N., XIV, (1370)
 Ateng, R., XI, 310
 Atherton, D. O., XV, 644
 Atkins, C. D., XIV, 941, 1989, 1995; XV, 1312
 Atkinson, F. E., XI, 1471, (1506); XII, 687; XIII, 1070; XIV, 1413, (1431); XV, 1409
 Atkinson, H. J., XI, 688; XII, 407; XIV, 1671
 Atkinson, J. D., XII, 109, 885; XV, 102
 Attygalle, A. B., XI, (1370); XII, 694
 Atumi, K., XI, 888
 Atwater, C. G., XII, 25
 Aubert, P., XII, 1097
 Aubert, T., XIV, 1032
 Aubréville, A., XV, 1240
 Austin, C. J., XIV, 1909
 Austin, C. R., XV, 330
 Austin, J. P., XI, 358
 Australia, C.S.I.R., *see* Council
 Australian Institute of Agricultural Science, XIV, 972
 Avakian, A. A., XI, 1254
 Avakian, S. A., XV, 528, 556
 Avanzi, E., XII, 473
 Avdonin, N., XIV, 974
 Avens, A. W., XI, 1199; XII, (462), 1345; XIII, 1325; XIV, 1615; XV, (598)
 Averno Sacca, R. A., XII, 217
 Avery, G. S., Jr., XI, 1056; XII, 4, (765); XIII, 362; XIV, 1004, (1030), 1476; XV, (431), 966
 Axelrod, B., XIV, (412)
 Ayers, A. D., XIV, 282; XV, 746
 Ayers, G. W., XIV, 1728
 Aykroyd, W. R., XIII, 329
 Aylen, D., XI, 355; XII, 1010, (1496)
 Ayres, A. S., XIV, (365)
 Ayres, T. B., XIII, 651
 Ayyangar, G. N., XII, 657
 De Azevedo, A. R., XIV, (1184); XV, 1613
 Ažigoev, P. K., XIV, 462
 B., H. R., XIII, 647
 Babb, M. F., XI, (1270); XIV, 812; XV, (1852)f
 Bacchi, O., XIV, (858)
 Bacharach, A. L., XIII, 1583; XIV, 1968; XV, 332, 1314
 Bacher, T., XI, 479; XIII, 524
 Badenhuizen, N. P., XI, (681), (1370)
 Baens, L., XII, 692
 Bagenal, N. B., XI, 34, 1116, 1132; XII, 422; XV, 2061
 Baghdadi, H. A., XIV, 368
 Baguena, L., XV, 841
 Bahrt, G. M., XI, 860, 861
 Bahtadze, K. E., XI, 1375
 Baier, W. E., XI, 631
 Baikov, A. A., XIV, 973
 Bailey, D. L., XV, (2059)n
 Bailey, G. F., XIV, 936; XV, 907
 Bailey, J. S., XI, (1137); XII, 830, (1246); XIII, 1181; XIV, 160, 1550; XV, 50, 77, 982, 1502
 Bailey, L. F., XIV, 782, 1274, 1276; XV, 405
 Bailey, S. F., XIV, 792
 Baillaud, E., XV, 1951
 Bain, D. C., XV, 1839
 Bain, F. M., XI, (248); XII, 558; XV, (2082)f
 Bain, H. F., XI, (1137); XV, (526), 1033
 Baines, R. C., XV, (774), (1658)b
 Baird, E., XIII, (245)
 Bajwa, B. S., XIII, 1476
 Bajwa, S. B. S., XV, 1866, 1868, 1871, 1875, 1876, 2005
 Baker, A. C., XV, 798
 Baker, A. D., XIV, (1298)
 Baker, C. E., XII, 82; XIV, 75, 1377; XV, 489, (2011)a
 Baker, E. W., XIV, (1662); XV, (1914)a
 Baker, F. E., XIII, 1338
 Baker, F. T., XII, (982)
 Baker, G. A., XII, 1244; XV, 480
 Baker, G. L., XIV, (1431)
 Baker, H., XIV, 601; XV, (1071)
 Baker, J. O., XV, 912
 Baker, K. F., XIII, 239; XV, 769
 Baker, L. C., XIII, 1581
 Baker, R. E. D., XI, 963, (965), 1391; XIII, 284, 600, 1005, 1526; XIV, 343; XV, 290, 291
 (Baker, R. E. D.), XIV, 885
 Bakhtadze, *see* Bahtadze
 Bakke, A. L., XV, (128)
 Balahovskii, S. D., XV, 882
 Balandin, D. A., XIV, 1724
 Balandin, F. V., XV, 1694
 Bald, J. G., XI, 459, 791, 797, 1227; XII, 149, 1380; XIII, (1358); XIV, (193)
 Baldacci, E., XV, 527
 Baldwin, —, XV, 357
 Baldwin, I. L., XIII, (1270)
 Balks, R., XIV, 1589
 Ball, C. D., XIV, (1298)
 Ball, E., XI, 351; XV, (34)
 Ball, R. S., XIII, 1506; XIV, 633, (1184)
 Ballantyne, J. A., XII, 1124, 1258; XIII, 1054; XIV, (1431)
 Ballard, C. W., XIV, 1235
 Ballard, L. A. T., XII, 740
 Ballentine, R., XI, (1506)
 Ballinger, R. J., XIV, 1269
 Balls, A. K., XI, 1485; XIV, (412)
 Balog, E., XIII, 1066; XIV, 935, 1975, 1978
 Balog, E. G., XIV, 933
 Bal Singh, XI, 1093; XII, 554
 Bal Singh Bajwa, XI, 142, 225, 237, 1324
 Bange, J. A., XI, 145
 Ban'kovski, A. I., XIV, 709
 Bannerjee, H. K., XI, 1417
 Baptist, B. A., XV, (1995)b
 Baptista, A., XII, 1276, 1277; XIII, 1217
 Baptista, J. E., XV, 1614
 Baranov, N., XIV, 1483
 Baranov, V. I., XII, 742
 Baranovskii, A. L., XIV, 722, 1300
 Barave, R. V., XIII, 1086
 Barbados, Central Sugarcane Breeding Station, XIII, (672)
 Barbados Department of Agriculture, XII, (337), 1573; XV, 2072
 Barber, H. S., XII, 871
 Barbut, M., XV, 1151
 Barçante, I., XV, (1298)
 Bardia Bardia, R., XV, 1608, 1630, 1707
 Bare, C. O., XV, 1152
 Barger, W. R., XII, 670
 Barker, B. T. P., XIV, 969, 1478
 Barker, C. H., XV, 1651
 Barker, H. A., XII, (1454)
 Barker, J., XI, 1499; XIV, 934
 Barnell, E., XV, 860
 Barnell, H. R., XII, 281; XIII, 629; XIV, 1388, 1389; XV, 860
 Barnes, B., XIV, (2003)
 Barnes, E. M., XV, 328, (2059)m
 Barnes, E. O., XI, (737)
 Barnes, H., XI, 1250; XIV, 168, 352, 358; XV, 861, 1216, 1339
 Barnes, H. F., XII, 458; XIV, 1680, 1954; XV, 107
 Barnes, H. V., XIV, 2015
 Barnes, J. W., XIV, 1874
 Barnes, M. M., XV, 1048
 Barnett, R. J., XII, 59; XIV, (1545), 1581
 Barnett, W. L. E., XI, 837
 Barnhart, C. S., XIII, 555, 975
 Barnley, A. W., XIV, 1347
 Barr, C. G., XIV, (755), 1177
 Barratt, R. W., XV, (598)
 Barrentine, M., XII, 974
 Barrentine, M. W., XIV, 1766
 Barrett, J. T., XV, 564
 Barrientos, L., XIII, 1502
 Barrons, K. C., XI, 1251; XIII, 165, 200, 921, 926; XIV, 1665; XV, 1700, 1758, (1852)e
 de Barros, P. P., XV, 844
 Barroso, L. J., XV, 1916
 Barson, D. M., XIV, 1269
 Barthakur, L., XII, (1584)

AUTHOR INDEX

- Barthel, W. F., XIII, 1364; XIV, 1697, (1803)
- Bartholomew, E. T., XI, 997, 1336; XII, 1478, (1480), 1491; XIII, 251, 569, 962; XV, 262, 795, 796, 892, 1889, (2059)a
- Bartlett, K. A., XII, 260
- Bartlett, S., XV, 1285
- Barton, L. H. G., XIII, 1580
- Barton, L. V., XI, 376, 1077; XIII, 1562, 1563; XIV, 1190
- Barton-Wright, E., XI, (1229)
- Barton-Wright, E. C., XIV, (1431)
- Barua, D. N., XI, (248)
- Basil, H., XI, 986
- Bastet, M. A., XV, (1336)
- Basutoland Department of Agriculture, XI, (1526); XII, (1164); XIII, (1100); XV, (1366), (2082)a
- Batchelor, L. D., XIV, 302, 946, 1825
- Bateman, A. J., XV, 205
- Baten, W. D., XI, (1092); XII, (1454)
- Bates, G. H., XII, 131; XIII, 1354
- Batho, H. F., XIV, (1476); XV, 1390
- Bathurst, A. C., XIII, 1471; XIV, 1827, 1828; XV, 1197
- Batjer, L. P., XII, 74, 1253, 1266; XIII, 745, 765, 1182; XIV, 70, 1534, 1536; XV, 499, 1491
- Baton, W. B., XIII, 744
- Batra, A. L., XV, 1147
- Batt, R. F., XIV, (635); XV, 1657
- Batten, E. T., XV, 1982
- Bauch, R., XIV, 455
- Bauer, A. B., XII, 481; XIII, 1362
- Bauer, K. H., XII, 946; XIV, 711; XV, 162
- Bauernfeind, J. C., XV, (2060)c
- Baumann, E. J., XIV, 1400
- Baumeister, W., XII, 979
- Baumgartner, O., XI, 493
- Baur, E., XII, 1394
- Baur, K., XI, 1172; XII, 440
- Bausch, S., XIV, 1396; XV, 325
- Bausor, S. C., XI, 339; XII, 755; XIII, 203
- Bayer, A. V., XIII, (1182)
- Bawden, F. C., XI, 74, (821); XIII, 153, (874); XIV, (673), 947; XV, 542, 544, (1185)
- Baxter, A., XII, (367)
- Baylis, G. T. S., XI, 1241, 1273; XII, (982); XIII, 943
- Baynes, W. C., XIV, 1534
- Bazyrina, E. N., XV, 1796
- Beach, C., XIII, 233
- Beach, F. H., XI, 727
- Beach, G., XV, 48
- Beach, W. S., XIII, 935
- Beacham, L. M., XI, 1319
- Beachell, H. M., XIII, (1032)
- Beadle, B. W., XIV, 1963
- Beakbane, A. B., XI, 42, 58, 79, 1102, 1132; XV, 467, 1444, 1561
- Beal, J. M., XI, (347); XIV, (297), (1816); XV, 426, 1402
- Beale, H. P., XV, (758)
- Beames, G. H., XV, 743
- Bear, E. M., XII, 1363; XV, 1492
- Beard, F. E., XIII, 394, (1182); XV, 413
- Beard, F. H., XIII, 488, 894, 895, 1370, 1371, 1372, 1373, (1374); XIV, 1708, 1709; XV, 1718, 1719
- Beare, J. A., XII, 76; XIV, 1576, (1803); XV, 1576
- Beasley, E. W., XII, 356
- Beattie, H. G., XI, 991; XIII, 652, 1077; XIV, 1988, (2003)
- Beattie, W. R., XI, 133
- Beaty, H. H., XI, 29
- Beauchamp, C. E., XII, 751
- Beaumont, A., XI, 834; XII, 933; XV, 1564
- Beavens, E. A., XI, 991, 1465
- Beavers, D., XI, (641)
- Beck, W. A., XII, 1186
- Beckenbach, J. R., XV, 700, 723
- Becker, A., XIV, 1691
- Becker, J., XIV, 404, 405
- Becker, K. E., XV, 132
- Becker, R. B., XI, 1504
- Becker-Dillingen, J., XIV, (1803); XV, (1493)a
- Beckett, W. H., XV, 1268
- Beckley, E., XIV, 1270
- Beckley, V. A., XI, 177, 1483; XII, 633, 685; XIII, 491; XIV, 334; XV, 125
- Beckwith, C. S., XI, 1194; XIII, (1211); XIV, 96, 140, (1567)
- Bedford, C. L., XIII, 1601; XIV, 1510
- Bedford, E. C. G., XII, 565; XIII, 976
- Beeson, K. C., XI, 686; XII, 974; XIII, 1420; XIV, 1766
- Beetle, A. A., XIV, (458)
- Beggis, J. P., XIII, 1376
- Bégué, H., XV, 1633
- Beier, R. L., XI, 1329; XIV, 1854
- Beijerinck, M. W., XII, 1394
- Beikina, A. D., XV, 653
- Beinhart, E. G., XIV, 2001
- Beirnaert, A., XIII, 613, 614, 615; XIV, (1476), 1925, (1932)
- Beketovskii, D. N., XV, 234
- Belchikova, N. P., XII, 1416
- Belgrave, W. N. C., XI, 1036; XII, 328
- Belikov, P. S., XV, 1142
- Belkengren, R. O., XII, (1390)
- Bell, G. D. H., XII, 481, 920, 921; XIII, 1362
- Bell, H. P., XI, 397; XII, 136
- Bell, T. A., XIII, 86
- Bellet, H., XV, 1585
- Bello, A. C., XI, 961, 1442
- Bellot Rodriguez, F., XV, 1737
- Belohonov, I. V., XII, 844
- Belot, A., XV, 1000
- Belov, M. G., XIV, 634, 713
- Belovickaja, N. A., XIV, 1209
- Belval, H., XIII, 333
- Bence Pieres, R., XIV, 1387
- Bender, R., XV, 868
- Benedict, H. M., XV, 665, 671, 1129
- Benham, G. H., XIV, (1431)
- Benlloch, M., XV, 1592
- Ben-Meir, Y., XV, 1207
- Benne, E. J., XI, (1092); XII, 143
- Bennet-Clark, T. A., XI, (380); XIV, (1476)
- Bennett, C. W., XIV, 206, 232, 1213; XV, 548
- Bennett, E., XII, 671; XV, 686
- Bennett, E. H., XV, 2062
- Bennett, J. P., XI, 344
- Bennett, L. G., XIV, 1783
- Bennett, R. E., XIII, (367)
- Bennett, S. H., XIII, 837, 863; XV, 1619
- Benton, R. J., XI, 150; XII, 1001; XIII, 971, 1470; XV, 777, 1879
- Benton, S. F., XI, (1506)
- Beran, F., XIV, 595, 596, 627
- von Berenberg-Gossler, G., XV, 1688
- Berenbom, M., XV, (1853)d
- Bereznoi, I., XI, 1375
- Bergamin, J., XV, 837
- Bergdolt, E., XII, 354
- Berger, J., XII, 4, (765); XIII, 362; XIV, 1004, (1030), (1476); XV, 966
- Berger, K. C., XIV, 449
- Bergeret, G., XI, 1087; XII, (311); XIII, (656); XIV, 1382, 1385, 1419, 1993; XV, 1323
- Bergman, H. F., XIV, 102
- Bergmann, G. G., XV, 187
- Bergström, I., XIII, 1375; XIV, 218, 249
- Bergström, S., XIV, 248
- Bergström-Keillander, I., XV, 238
- van Berkel, H., XI, (965)
- Berkeley, G. H., XII, 112, 113, (982); XIII, (101), 889; XIV, 1135, 1591, 1774, 1776
- Berlin, Biologische Reichsanstalt für Land-u. Forstwirtschaft, XII, (462)
- Berlin, Reichsnährstand, XI, 406
- Bermuda Department of Agriculture, XI, (1054); XII, 1148; XIV, 418; XV, 370, (1366)
- Berndt, W., XIII, (45)
- Bernon, G., XV, 1516, 1525, 1585, 1587, (1658)f
- Bernstein, P., XIII, 1036
- Berry, L. J., XIV, (746)
- Berry, W. E., XII, 810, 1104
- Bertelli, J. C., XV, 254
- Bertelli, L. K., XV, 254
- Bertramson, B. R., XII, 1189
- Bertrand, G., XV, 1378, 1379, 1382
- Bertrand, H. W. R., XIII, 606
- Bertrand, P., XIII, (231)
- Bertullo, W. A., XII, 557
- Berwick, E. J. H., XI, 588
- Besoekisch Proefstation, XII, (641)
- Besser, A. A., XIV, 1214

AUTHOR INDEX

- Bessey, E. A., **XII**, 882
 Best, R. J., **XI**, (75), (501)
 Bethel, R., **XI**, 308
 Betrem, J. G., **XI**, 933
 Bettenay, W. J., **XIV**, 1417
 Bevan, W. H. C., **XII**, 497
 Bevâncon, L., **XIII**, 733, 967
 Bewley, W. F., **XI**, 92, 449, 822,
 1249; **XII**, 169, 899, 910,
 1357; **XIV**, 776, 789, 1203
 (Bewley, W. F.), **XIII**, 1339;
XIV, 773
 Bexon, D., **XI**, (380); **XIV**,
 (1476)
 Beyer, R., **XIII**, 87
 Beyers, E., **XI**, 66, 67
 Beynon, V. H., **XV**, 1075
 Bey-Rozet, L., **XIII**, 959
 Bhalarao, G. D., **XV**, 615
 Bhaskaran, T. R., **XII**, 743
 Bhat, S. S., **XI**, 1447; **XIV**, 892,
 1922, 1926; **XV**, 1888
 Bhattacharya, B. K., **XIV**, 1638
 Bhattacharya, S. C., **XIV**, 1822
 Bhide, B. V., **XV**, 1653
 Biale, J. B., **XI**, 1456; **XII**, (288);
XIII, 1565; **XIV**, 1949
 Bibikova, A. F., **XIII**, 1239
 Bickerton, J. M., **XIV**, 1304
 van der Bie, G. J., **XII**, (259),
 638, 1055
 Biebel, J. P., **XII**, 1177; **XIII**,
 (947); **XIV**, 1289; **XV**, 1693
 Bieberdorf, G. A., **XIV**, (1662)
 Biebl, R., **XIV**, 811
 Bieri, F., **XI**, 966
 Bierig, A., **XII**, (659)
 Biermann, C., **XI**, 503
 Bihar, Agricultural Department,
XI, 1019, (1526)
 Billard, J. J., **XIV**, 1906
 Billes, D. J., **XI**, 1389
 Billings, O. B., **XII**, (462)
 Bindloss, E., **XII**, (752)
 Binkley, A. M., **XIV**, 1733; **XV**,
 134, 224, 353
 Binstadt, **XIV**, (1184)
 Biological Branch, Division of
 Science Services, N.S.W.,
 see New South Wales
 Biologische Reichsanstalt für
 Land- u. Forstwirtschaft,
 Berlin, **XII**, (462)
 Birch, H. F., **XI**, 1388
 Birjukov, A. P., **XIII**, 1147
 Birkeland, C. J., **XI**, (779)
 Bisby, G. R., **XIII**, 1621
 Bishop, W. J., **XIV**, 468
 Bisson, C. S., **XI**, 409; **XII**, 1129
 Biswas, S. C., **XIII**, 1608
 Bitancourt, A. A., **XIV**, 308, 309,
 1837
 Bitters, W. P., **XV**, 783
 Bizzell, J. A., **XIV**, (1476)
 Björling, K., **XIII**, 1274; **XIV**,
 233; **XV**, 1575
 Black, H. G., **XII**, (1603)
 Black, L. M., **XI**, (1229); **XIII**,
 (877)
 Black, L. S., **XIV**, 1426
 Black, M., **XII**, (18)
 Black, M. A., **XIV**, 1689
 Black, M. W., **XIV**, 1373, 1374,
 1375; **XV**, 45, 65
 Black, W. E., **XIV**, (1545)
 Blackburn, K. B., **XIII**, 236
 Blackford, F. W., **XI**, 1325;
XIV, 246; **XV**, 1891
 Blackie, W. J., **XI**, 141, 282, 1487
 Blackman, G. E., **XII**, 956;
XIII, 465, 498, 513; **XIV**,
 700; **XV**, 1104, 1105
 (Blackman, G. E.), **XIV**, 744
 Blackmon, G. H., **XI**, 743, 753,
 1149, 1290; **XIII**, 565
 Blackmore, L., **XI**, 1241
 Blagoveshchensky, E. N., **XIV**,
 1119
 Blair, D. S., **XI**, 701, 735; **XV**,
 988
 Blair, E. M., **XV**, 1973
 Blair, E. V., **XIII**, 1071
 Blair, J. S., **XIII**, 651
 Blair, R., **XIV**, 1642
 Blair, S. Y., **XV**, (227)
 Blair, W. M., **XII**, 998; **XIII**, 24
 Blake, M. A., **XII**, 67, (85),
 (1246); **XIV**, 66, 1587; **XV**,
 451, 456, 1023, 1450
 Blake, S. F., **XIII**, 1535
 Blakers, A. L., **XIV**, (412)
 Blakeslee, A. F., **XV**, (431)
 Blanchard, E. E., **XIV**, 591
 Blank, F., **XIV**, 1741
 Blanton, F. S., **XII**, (1460);
XIII, 540
 Blasberg, C. H., **XIV**, 60; **XV**,
 (227)
 Blaser, H. W., **XV**, (1185)
 Blauvelt, W. E., **XIII**, (956)
 Blaydes, G. W., **XV**, (431)
 Blees, M., **XIV**, 1582
 Blick, R. T. J., **XIV**, 1700; **XV**,
 153, (758)
 Blickle, R. L., **XIII**, 126
 Bliedernicht, L., **XIV**, 1227
 Bligh, R. D. L., **XII**, 368; **XV**,
 993
 Blin, H., **XIII**, 215, 263
 Bliss, D. E., **XI**, 889; **XII**, 577,
 1491; **XIII**, (264), 568, 569;
XV, 778, 1209, 1909, (1914)b
 Bloch, R., **XII**, 12, (18); **XIII**,
 687; **XIV**, 251
 Blodgett, C. O., **XI**, 1294
 Blodgett, E. C., **XIII**, 424, 1263;
XIV, 574, 1593; **XV**, (1658)c
 Blohinceva, I. I., **XV**, 1752
 Blood, H. L., **XIII**, 526
 Bloom, E. F., **XIV**, 1551
 Blum, H. B., **XIII**, 1068, 1069,
 1614
 Blum, J. L., **XI**, (1067)
 Blumer, S., **XIV**, 1586; **XV**,
 1550, 1552
 Bobb, M. L., **XV**, 1628, (1658)d
 Bobko, E. V., **XV**, 1380
 Bobrov, A. I., **XIV**, 44
 Bočanceva, Z. P., **XV**, 235
 Boddy, F. A., **XIII**, 516, 1411
 Bode, H. R., **XII**, (982)
 Bode, O., **XIV**, 438; **XV**, (432)
 Bodine, E. W., **XI**, (779); **XII**,
 850; **XIII**, 99
 Bodman, G. B., **XIII**, (31)
 Boehm, B., **XV**, 565
 Boerger, A., **XII**, 1020
 Boettner, J., **XIII**, 850
 Bohart, G. S., **XI**, 116; **XV**,
 (1336)
 Bohart, R. M., **XIV**, 137
 Böhm, J., **XII**, 373
 Bohn, G. W., **XIV**, 812
 Böhrringer, P., **XIV**, (945)
 Boicourt, A. W., **XII**, 543
 Boikoff, D., **XIII**, 743
 du Bois, C., **XI**, 974
 Bois, E., **XII**, 1137
 Boischoot, P., **XV**, 1844, (1852)g
 Bolas, B. D., **XI**, 117; **XII**, 504
 Bolhuis, G. G., **XII**, 272
 Bologovskaja, R. F., **XIII**, 1207
 Bolton, E., **XIII**, 236
 Bolwig, N., **XV**, 575
 Bomford, D. R., **XV**, 1086
 Bond, G., **XII**, 31, (982)
 Bond, J., **XII**, 615
 Bond, L., **XII**, 1457
 Bond, T. E. T., **XI**, 921, 1372;
XII, 270; **XIII**, 274, 1031,
 1513; **XIV**, 725, 876; **XV**,
 828, 1246, 1932
 Bond, W. E., **XV**, 1994
 Bond, W. E. T., **XV**, 863
 Bondar, G., **XII**, 650, 1040, 1083,
 1084, 1085, 1086, 1087; **XIII**,
 1017
 Bonde, R., **XI**, (131); **XII**, (480),
 1110, 1385; **XIII**, 155; **XIV**,
 (193); **XV**, (227)
 Bondi, A., **XI**, 467; **XII**, 1139,
 1140
 Bonn, A. E., **XII**, 122
 Bonner, J., **XII**, 969, 1435;
XIII, (676); **XIV**, 718, 1243;
XV, (431), 670, 719
 Bonney, V. B., **XV**, 2031
 Bono, B. B., **XI**, 511
 Bonsma, J. C., **XII**, 734
 Booer, J. R., **XV**, 689
 Boother, L. E., **XII**, (708)
 Boon-Long, T. S., **XI**, 1072
 Booth, V., **XII**, 1135
 Booth, V. H., **XI**, 1004
 Bordas, J., **XV**, 1511
 Borden, A. D., **XIV**, 1625; **XV**,
 116, 1040
 Borg, R. M., **XV**, 872
 Borisoglebski, A. D., **XIII**, 1145;
XIV, 30
 Borkovskaja, V. A., **XII**, 9
 Bornas y de Urcullu, G., **XV**,
 1186, 1187
 Börner, C., **XII**, 797, 798; **XIV**,
 598
 Bornstein, B., **XII**, 1537
 Bornstein, B. T., **XII**, 1555
 Borodavčenko, M. V., **XIV**, 786
 Borovick, S. A., **XV**, 187
 Borovick-Romanova, T. F., **XV**,
 8, 187
 Borozdina, A., **XIII**, 140
 Borthwick, H. A., **XI**, 487, 1070;
XII, (1454); **XIII**, (1454);
XIV, 227
 Bose, A. C., **XIV**, 1006

AUTHOR INDEX

- Bose, R. D., **XI**, (608)
 Boshart, K., **XI**, 489; **XIV**, 647, 648; **XV**, (1852)h
 Bosher, J. E., **XIII**, 911
 Boswell, J. C., **XV**, 397
 Boswell, V. R., **XIII**, 130, (132), 179; **XIV**, 252
 Botanical Society of America, **XV**, 431
 Botez, I., **XI**, 1106
 Both, E., **XIV**, 1234
 Bottini, H. T., **XI**, (740)
 Bouckaert, C., **XV**, 1784
 Bouilloud, M., **XV**, 335
 Bourne, A. I., **XII**, (880); **XIV**, 160; **XV**, 998, (1658)e
 Bouyoucos, G. J., **XI**, 26
 Bovey, P., **XI**, 766, 770; **XIV**, 1107
 Bovien, P., **XIII**, 862; **XV**, 575
 Bovingdon, H. H. S., **XV**, 344
 Bowen, C. V., **XIII**, (451); **XIV**, 1659, 1697, (1803)
 Bower, C. A., **XIII**, (1182)
 Bowman, F. T., **XI**, 401, 601, 602, 717, 731, 1125; **XII**, 54, 404; **XIII**, 719; **XIV**, 49; **XV**, 1423
 Bowman, J. J., **XI**, 78
 Bowser, P. H., **XIII**, 930
 Box, H. E., **XIV**, 1900; **XV**, 1258
 Boyce, A. M., **XI**, 159, 528; **XII**, 564, 1473, 1476; **XIII**, 555, 975; **XIV**, 855, 1655, 1847
 Boyce Thompson Institute, **XI**, 373
 Boyd, A. E. W., **XIII**, (1358)
 Boyd, D. A., **XIV**, (1476)
 Boyd, J. M., **XV**, 1322
 Boyden, B. L., **XII**, 231
 Boyer, C. A., **XIII**, 818; **XV**, 1565
 Boyes, D., **XI**, 780
 Boyes, J., **XII**, (982)
 Boyes, W. W., **XI**, 258, 260, 261, (291); **XII**, 1554
 Boyle, A. M., **XIV**, (1803); **XV**, 126, 552, 1569
 Boyle, L. W., **XV**, 1579
 Boynton, D., **XII**, 815, 816, 1252; **XIII**, 1256; **XIV**, 61, 1071, 1513, 1514, (1545); **XV**, 482, 483, 533, 1002, 1479
 Bozovaisky, L. S., **XIII**, 30
 Bozzini, G., **XII**, 799
 Bradfield, A. E., **XV**, (1336)
 Bradfield, R., **XIII**, (1182)
 Bradford, F. C., **XI**, 709; **XIV**, 1497, 1585, (1662); **XV**, 501
 (Bradshaw, M. A.), **XIII**, 315
 Bradt, O. A., **XI**, 1119; **XIII**, 756; **XV**, 1461, 1485
 Brady, N. C., **XV**, 1978, 1979
 Bragina, F., **XV**, 1133
 Braid, K. W., **XIV**, 146
 Brain, E. D., **XII**, 5; **XV**, (1852)i
 Brair, J. H., **XI**, 772
 Brake, J., **XIV**, (290)
 Bramstedt, F., **XIII**, 1291
 Branas, J., **XV**, 1516, 1525, 1584, 1585, 1587, 1591, (1658)f
 Brand, D. D., **XIII**, 1010
 Brandão, J. S., **XV**, 163
 Brandenburg, E., **XII**, 1424; **XIV**, 217, 756
 Brandes, E. W., **XII**, 1413; **XIII**, (131), 1537
 Brangante, E. C., **XIV**, 879
 Brann, J. L., **XIV**, 1150, 1155
 Brannekow, T., **XIV**, (1298)
 Brannon, L. W., **XIII**, 1368; **XV**, 1835
 Branscheidt, P., **XI**, 38, 391
 Brase, K. D., **XI**, 708, (737); **XII**, 51, 52; **XIII**, 1171; **XIV**, 1496, (1545), 1596; **XV**, (505)
 Brasher, E. P., **XII**, 508
 Bratley, C. O., **XIV**, (1955)
 Braucher, O. L., **XII**, 105
 Braude, R., **XII**, 1559
 Braun, A. C., **XII**, (18); **XIV**, 576
 Braun, A. E., **XIII**, 197
 Braun, A. J., **XIII**, 814, 821; **XV**, (597)
 Braun, H., **XIV**, 289
 Braverman, J. B. S., **XI**, 1009
 Bray, G. T., **XV**, 1064, 1906, 1949, 2051, 2052, 2053
 Bray, R. H., **XIII**, (1182); **XV**, 407
 Bray, R. J., **XV**, 241
 Breakey, E. P., **XIV**, (1816); **XV**, (1658)g
 Bream, C. E., **XII**, 577
 Bredemann, G., **XIV**, (680)
 Bredenkamp, J., **XIV**, (1184); **XV**, (599)
 Bregger, J. T., **XIV**, 512
 Breitwieser, K., **XV**, (227), (1852)r
 von Bremen, W., **XIII**, 809
 Bremer, H., **XI**, (1278); **XII**, (194), 976; **XV**, 1723
 Bremond, E., **XV**, 1583
 Brencley, W. E., **XII**, 499; **XIV**, 5
 Brentzel, W. E., **XII**, 479
 Breon, W. S., **XIV**, 1769; **XV**, 724
 Breschke, —, **XIV**, (641)
 Breviglieri, N., **XIV**, 1059
 Brewer, G. E. F., **XIV**, (1030)
 Brewer, W. R., **XIV**, 1719
 Briant, A. K., **XIII**, 619; **XIV**, 898
 Brichet, J., **XIII**, 731, 779, 804, 825, 960, 961, 970, 972, 989, 991; **XV**, (2059)x
 Brieger, F. G., **XI**, 494, 1366; **XIII**, 544, 595
 Brien, R. M., **XI**, 1228, 1265; **XIV**, 580; **XV**, 102, 1572
 Brierley, P., **XI**, 823, 1299; **XII**, 198, 546, 1459; **XIV**, (1816); **XV**, 197, 242, (596), (774)
 Brierley, W. G., **XII**, 1290; **XIII**, (81); **XIV**, (161); **XV**, 1507
 Briese, R. R., **XI**, (1092)
 Briffa, J., **XV**, 1664
 Briggs, G. B., **XIV**, 829
 Briggs, G. M., **XIV**, 181
 Briggs, L. H., **XII**, (311)
 Brightwell, S. T. P., **XII**, 892
 Brightwell, W. T., **XI**, (1137)
 Brill, G. D., **XII**, (736)
 Brilliant, V. A., **XV**, (34)
 Brimble, L. J. F., **XV**, 2063
 Brimblecombe, A. R., **XIV**, 314
 Brinkerhoff, L. A., **XII**, 1250
 Briscoe, C. F., **XIII**, 945
 Briscoe, H. V. A., **XIII**, 635; **XIV**, 1647
 Brison, F. R., **XII**, 1421
 (British Carnation Society), **XIV**, 294
 British Columbia Ministry of Agriculture, **XI**, 49, 1020; **XII**, 522
 (British Ecological Society), **XIV**, 430
 British Guiana Department of Agriculture, **XI**, (105), (1526); **XIII**, (347), (1638); **XV**, (946)
 British Honduras Department of Agriculture, **XII**, (337); **XIII**, (1100); **XIV**, (968); **XV**, (946), 2073
 British Mycological Society, Plant Pathology Committee, **XV**, 364
 British West Indies, Central Sugar Cane Breeding Station, **XIII**, (672)
 British West Indies, St. Vincent, Department of Agriculture, **XV**, (946)
 Briton-Jones, H. R., **XI**, 323
 Britten, H., **XI**, 647
 Britton, J. E., **XI**, 402; **XII**, 660; **XIII**, 1259; **XIV**, 511, 1376
 Broadbent, B. M., **XIV**, 313; **XV**, 1213
 Broadfoot, H., **XIII**, 47, 381; **XV**, 435
 Broadfoot, W. M., **XII**, 23
 Brodaty, E., **XV**, (1071)
 Brody, H. W., **XII**, 126; **XIII**, 112
 Bronson, T. E., **XIV**, 813; **XV**, 1067, 1183
 Brooklyn Botanic Gardens, **XV**, 1340
 Brooks, A. N., **XV**, (758)
 Brooks, C., **XV**, 793
 Brooks, F. A., **XI**, 153, 519
 Brooks, F. T., **XII**, 1301
 Brooks, H. E., **XIII**, (947)
 Brooks, L. E., **XII**, 1494
 Brooks, R. M., **XI**, 417; **XII**, 60, 1239; **XV**, 440, 480
 Brother, G. H., **XI**, (641)
 Brouwers, M. J. A., **XV**, 300
 Brovtsyn, A. N., **XIV**, 284
 Brown, A. G., **XIII**, 388, 1174
 Brown, A. P., **XI**, 1496
 Brown, B. A., **XIII**, 855
 Brown, B. E., **XI**, 1226; **XV**, 412
 (Brown, B. M.), **XIV**, 966
 Brown, C. A. C., **XI**, 324; **XIII**, 143
 (Brown, C. A. C.), **XV**, 1085
 Brown, D. D., **XII**, 190, (1095); **XIII**, 986; **XV**, 152, 633

- Brown, D. S., XII, 1294; XIV, 119
 Brown, E. O., XIV, 180
 Brown, F. C., XIV, 738; XV, 713
 Brown, G. G., XII, 1260; XIII, 746; XIV, 86
 Brown, H. D., XI, 108, 1207; XIV, 1673, 1970, 1981
 Brown, H. E., XII, 1326
 Brown, H. M., XI, 484
 Brown, J. G., XII, 1251; XIII, 1184; XIV, (1803); XV, 126, 552, 1569
 (Brown, J. G.), XV, 551
 Brown, L. R., XIV, 1326
 Brown, N. A., XII, (765)
 Brown, O., XIII, (1358)
 Brown, P. H., XIII, 907
 Brown, R., XII, (1454); XIV, 18
 Brown, R. L., XIII, 701
 Brown, R. M., XV, (758)
 Brown, R. T., XII, 227; XIII, 1488
 Brown, S. M., XIII, 249, 250, 254, 1182, 1472; XIV, 1826; XV, 1202
 Brown, S. W., XIV, (534)
 Brown, W., XI, 111; XV, 1536
 Brown, W. B., XII, 1538
 Brown, W. W., XI, 1080
 Browne, C. A., XIV, 2006
 Browne, F. S., XI, 969
 Browne, G., XIII, 1112
 Browning, G. M., XII, 23, 81
 Broyer, T. C., XI, 666; XII, 777, (1454); XIII, 1117; XV, 667
 Brubaker, R. W., XIII, (1369)
 Bruce, A., XI, 923, 1428
 van der Bruel, W. E., XV, 1783, (1852)
 Brühne, F., XIV, 1403
 Brunel, A., XV, 954
 Brunk, M. E., XV, 1780
 Brunson, M. H., XIV, 1629
 Brunt, D., XV, 1554
 van Brunt, E. R., XIV, 1224
 Bryan, J. D., XV, 1813
 Bryan, O. C., XII, 999
 Bryant, D. M., XII, 474
 Bryant, L. R., XIII, 1252; XV, 39, 48, 734
 (Bryce, A. D.), XIII, 813
 Bryce, A. D., XIII, 1264
 Bryce, J., XI, 1282
 Bryden, J. D., XI, 52; XII, 48
 Bryner, W., XI, 1114; XII, 53; XIII, 841, 1187; XIV, 52, 68, 112; XV, 44, 522, 1463, 1469
 Buchanan, M. T., XII, 42, 828; XIV, 68, (69), 402, 1205
 Buchinger, A., XV, 709, 711
 Buchta, V., XIV, 1043
 Buck, R. E., XI, 1494
 Buckland, L. L. R., XI, 1086
 Budagovskij, V. I., XIV, 475
 Budhiraja, K. L., XIII, 1542
 Buenos Aires University, XV, 949
 Bugakov, A., XV, 1079
 Bugajavinskii, A. A., XV, 94
 Bulgakov, N. I., XV, 882
 Bulgakov, S. W., XV, 1137
 Bulgakova, Z. P., XIII, 1353
 Bulger, J. W., XIII, (451)
 Bull, L. B., XV, 109
 Bullis, D. E., XV, (2059)b
 Bullock, J. F., XIV, 1699
 Bullock, R. M., XII, 787
 Bumgardner, R. J., XV, (1914)c
 Bunjatjan, G. H., XV, 150
 Bunting, A. H., XV, 1082
 Bureau of Agricultural and Industrial Chemistry, XV, 894
 Bureau of Chemistry, California, XII, 321
 Bureau de la défense des végétaux, Maroc, XIII, 426, 437, 572
 Bureau of Entomology and Plant Quarantine, U.S. Dep. Agriculture, XII, 468, 880
 Burger, H., XV, 522
 Burger, I. J., XV, 334
 Burgess, A. H., XIII, 894
 Burgess, E. D., XIV, 663
 Burgos, J. J., XIV, 64; (1476)
 Burgos (Peña), P., XI, 537
 Burk, E. F., XII, 571
 Burkhardt, G. J., XIV, 1391
 Burkhardt, L., XI, 671; XIII, 1041, 1577; XIV, (534), 554; XV, 519
 Burkholder, C. L., XI, 436; XV, 1426
 Burkholder, P. R., XI, 345; XIII, 1582
 Burkholder, W. H., XIV, 797
 Burkland, E. R., XIII, 1531
 Burison, W. L., XV, 178
 Burma Department of Agriculture, XI, 913, 924, 951, (965), (1054), 1423; XII, 202, 267
 Burns, J. G., XII, 1074
 Burns, W., XI, 211, 547, 606; XII, 658; XIII, 1331
 Buron, P., XV, 1768
 Burr, H. S., XIV, (1803)
 (Burr, H. S.), XIII, 4
 Burrell, A. B., XII, 1250; XIV, 1513; XV, 533, 1066
 Burrell, R. C., XI, 108, (131); XII, (982)
 Burrett, A., XI, 1473
 Burris, R. H., XV, 959
 Burroughs, L. F., XIV, (2003)
 Burrows, F. W., XII, 1486
 Burrows, T. W., XV, 241
 Burström, H., XIII, (367), 1116
 Burton, M. G., XV, (1185)
 Burton, W. G., XIV, (1803)
 Burtraw, H. J., XIV, (1431)
 Burvill, G. H., XIV, 542
 Busbey, R. L., XII, 1479; XIII, 558, (562); XIV, 312, 856, (858), 1843, 1844; XV, 1210
 Bush, R., XIV, 948, 949, 2012; XV, 2064
 Bushnell, J., XI, (488); XII, 1372; XIII, 1135
 Bushnell, R. J., XI, (1073)
 Bustarret, J., XV, 1725
 Busvine, J. R., XIII, 840
 Butkevich, W. S., XIV, 1285
 Butler, C. G., XII, 390, 802; XIII, 1175, 1176
 (Butler, C. G.), XV, 997
 Butler, L., XI, (1266)
 Butler, O. R., XII, 1297
 Butterfield, N. W., XV, 743
 Buttfield, J. M., XIV, 1552; XV, (83)
 Buxton, D. A. J., XV, 1284
 Buzulin, G. S., XIII, 380
 Byer, A. C., XIII, 10
 Byers, G. B., XII, (532)
 Byers, H. G., XII, 34, 747, 748
 Bykov, B. A., XV, 29
 Bynum, E. K., XI, 914
 Byrom, M. H., XV, 1766
 C., C., XI, 794
 Cabral, R. V. de G., XIII, 1267
 Cada, E., XI, 567
 Cagle, L. R., XV, (1658)h
 Cahn, R. S., XV, (1071)
 Caillahan, M. H., XIV, 453, 993, 995, 1001, 1002; XV, 24, 324, 1083
 Cain, J. C., XII, 1250, 1252, 1266; XIII, 1256; XIV, (1545)
 Cain, R. F., XII, 1243
 Cairaschi, E. A., XIII, 100
 Cairns, D., XII, 521
 Calahan, C. L., XIII, 1306
 Calavan, E. C., XV, (598)
 Calder, R. A., XIII, 534; XIV, 1797, 1798
 Caldwell, E., XV, 2028
 Caldwell, J., XII, 1381; XIII, 189, 954; XV, 1160
 Caldwell, J. S., XIV, 372, 931, 1048, 1049, 1666; XV, 342, 514
 Caldwell, N. E. H., XI, 605; XIV, 315, 1885; XV, 1834
 California, Bureau of Chemistry, XII, 321
 California Citrograph (Symposium), XV, 775
 California Department of Agriculture, XII, (39), (138)
 California Fruit Growers' Exchange, Bureau of Pest Control, XIV, 848, 857
 California, Western Research Laboratory, Albany, XIV, (945)
 Callaghan, A. R., XI, 8
 Callan, E. McC., XII, 240; XIII, 1528; XIV, (903); XV, 1056
 Callenbach, J. A., XII, 869
 Calton, W. E., XIV, 1882
 Calvert, J., XIII, 584
 Camacho, R. R., XIII, 1508
 (Cameron, A. E.), XV, (245)
 Cameron, J. M., XII, 397
 Cameron, S. H., XI, 849, 854; XII, 211; XIV, 306, 1823; XV, 249, 787
 Camm, J., XI, 801
 Camp, A. F., XI, 857; XIV, 849
 Campau, E. J., XV, (1071)
 Campbell, A. H., XI, 934
 Campbell, C. R., XII, 226
 Campbell, G. A., XV, (1071)

AUTHOR INDEX

- Campbell, H., XIV, (2003)
 Campbell, J. C., XII, (1390)
 Campbell, T. G., XIII, 978
 Campbell, W. A., XV, 953
 Campbell, W. M., XV, 1108
 (Campden Research Station),
 XIII, 1609
 Campden Research Station, XIV,
 2018
 Campllonch (Romeu), I., XII,
 (1142)
 del Campo Gamio, J. M., XI, 850
 Campos, A. R., XV, 1922
 Canada Department of Agricul-
 ture, XIII, 663; XV, 927
 Canada, Minister of Agriculture,
 XI, 1021; XII, 322; XIII,
 662; XV, 371, 925
 Canada, National Research
 Council, XIII, 339; XIV,
 (968), (1455), 2019; XV, 926
 Canadian Horticultural Council,
 XIV, 952, 953
 Candioli, P., XII, 800
 Cannon, H. B., XI, 707
 Cannon, R. C., XV, 274
 Cantegrelle, XV, (2059)x
 Cantor, M. M., XV, 890
 Capellades, —, XIII, 964
 "Capital", XIV, 350
 Capo, B. G., XV, (1995)c,
 (1995)d
 Capucci, C., XI, 414
 Cárdenas, M., XII, 588, (595)
 Cardinell, H. A., XII, 129
 Cardwell, A. B., XII, 100
 Carey, M. A., XIV, 243
 Carleton, E. A., XII, 812
 Carlson, E. C., XIII, 435
 Carlson, F. W., XIII, 434; XIV,
 1628; XV, 576, 1049, (1071)
 Carlson, J. P., XIV, 1821
 Carlson, R. F., XV, 1432
 Carlsson, G. B., XV, (505)
 Carlton, W. M., XIV, 457
 Carman, C. E., XIV, 1655
 Carmin, J., XI, (171)
 Carnegie Institution, XI, 1022;
 XII, 1149
 Carnevale, J. A., XIV, 1339
 Carolus, R. L., XIII, 852
 Carpenter, C. C., XIII, 18
 Carpenter, J. B., XIII, 107, 119
 Carrera, C. J. M., XIV, (697)
 Carrick, N., XV, 169
 Carrick, R., XII, (462)
 Carroll, G. H., XIII, 359
 Carroll, J. C., XII, 199
 Carsner, E., XI, 103; XIV, 232;
 XV, (128)
 Carter, G., XII, 1335
 Carter, G. A., XIII, 1175; XV,
 1051
 Carter, J., XIII, 400
 Carter, R. H., XIII, 121; XIV,
 1648
 Carter, W., XII, (1518); XIII, 27;
 XIV, 360; XV, (1298), 1989
 Carter-Lee, W., XIII, 145
 Cartter, J. L., XIII, 532
 Carvalho, A., XIII, 595
 Carvalho, J. C. M., XIV, 1637
 Carvalho, R. de S., XIII, 553,
 981
 de Carvalho e Vasconcellos, J.,
 XII, 1276, 1277; XIII, 1217
 Casarrubia, A., XI, 495
 Cash, E. K., XIV, (1662)
 Cassidy, T. P., XV, 1745, 1746
 Cassil, C. C., XII, (200); XIII,
 434, (451), (1329); XIV, 1628;
 XV, (1071)
 Cass-Smith, W. P., XII, 439,
 1002; XIII, 942, 1435, 1448;
 XV, 98
 Castagne, E., XV, 1928
 Castberg, C., XIV, 138
 Castetter, E. F., XV, (431)
 Castle, E. S., XIII, (1138)
 Castro, R., XIV, 695, (945)
 Castro Esquivel, R., XII, 1497
 Cation, D., XII, 43, 435; XIII,
 818; XV, 1565, 1635
 Catlow, E., XV, 1443
 Cavzdari, E. E., XV, 1692
 Cawthron Institute, New Zealand,
 XI, 326, 1512; XIII, 1092;
 XIV, 954; XV, 372
 Cecil, S. R., XIII, 1042, 1043,
 1084
 Celino, M. S., XI, 185, 481, (1365)
 Čeliadinova, A., XV, 1112
 Čeliadinova, A. I., XII, 1284
 Celmer, R. F., XI, 1465; XIII,
 (1087)
 Čeremnyh, D., XV, 1666
 Čeresa, M. C. D., XV, 1593
 Černov, G. I., XI, 1216
 Černov, V. K., XV, 1375
 Čersov, N., XI, 1343
 Česar, H. P., XI, 1347; XIII, 48
 Česnokov, V. A., XV, 1796, 1808
 Ceylon, Coconut Research
 Scheme, XI, 1023; XIII,
 1093; XIV, 1437
 Ceylon Department of Agricul-
 ture, XI, (1054); XII, 323;
 XIII, (672); XIV, 955
 Ceylon, Rubber Research Board,
 XII, 324, 635, 636, 1053,
 1151; XIV, 957; XV, 928
 Ceylon, Rubber Research
 Scheme, XI, 575, 581; XIII,
 664, 1538, 1539; XIV, 347,
 1358, 1360, 1361, 1362, 1363,
 1916, 1917; XV, 1963, 1965,
 1969, 1970, 1971
 Ceylon, Tea Research Institute,
 XI, 1513; XII, 1574; XIII,
 1513; XIV, 956; XV, 929
 Chace, E. M., XII, 681, 1122
 Chadwick, D., XI, 652
 Chadwick, L. C., XI, 1057; XII,
 536; XIV, 1804
 Čhaidze, I., XI, 517
 Chain, E., XIV, 434
 Chakravarti, S. C., XII, 483, 942;
 XV, 164
 Chalmers, E. A., XV, 2021
 Chamberlain, D. W., XV, (598)
 Chamberlain, E. E., XI, 1262,
 1263
 Chamberlain, G. C., XI, 1161;
 XIV, 1591
 Chamberlain, H. de O., XIII,
 1397
 Chamberlin, F. S., XII, (982);
 XIV, 1707
 Chambers, R., XII, (18)
 Chambers, V. H., XIV, 1653;
 XV, 122
 (Chaminade, M. R.), XIV, 6
 Champlin, S. H., XIII, 1083
 Chan Choong, P. A., XIV, 1921
 Chandler, F. B., XI, (1137);
 XII, (411), 1422, 1423; XIII,
 74, 306; XIV, (755), 1551;
 XV, 513, 1010
 Chandler, W. H., XIII, 336
 Chapelow, H. C., XIV, (1476)
 Chapin, W. E., XIII, 701
 Chaplin, C. E., XV, 1482
 Chapman, G. W., XI, 1406
 Chapman, H. D., XI, 147; XII,
 1466; XIII, 247, 249, 250,
 254, 1182, 1472, 1473; XIV,
 304, 1826; XV, 419, 779, 786,
 1202, (1406)a
 Chapman, J. E., XIII, 1111
 Chapman, P. J., XI, 768, 1199;
 XII, (462), 1345; XIII, 1325;
 XIV, 1615
 (Chapman, V. J.), XV, 864
 Charavanapavan, C., XIV, 395,
 1424; XV, (2059)c
 Charkey, L. W., XV, 340
 Charley, V. L. S., XI, 624, 628,
 989, 990, 992, 993, 999;
 XII, 1107, 1116, 1117; XIII,
 1044, 1075, 1076, 1078, 1079,
 1584; XV, 980
 Charnaud, F. C., XV, 1934
 Charrrière, J., XII, 903, 904, 1544
 Charter, C. F., XII, (273)
 (Charter, C. F.), XIII, (672)
 Chase, S. B., XI, 741; XIII,
 (1235)
 Chase Protected Cultivation Ltd.,
 XI, 451
 Chaturvedi, H. S., XII, (1095)
 Cheadle, V. I., XII, (1195)
 Cheal, W. F., XIII, 410; XIV,
 510; XV, 1781
 Cheema, G. S., XI, 615, 616
 Cheesman, E. E., XI, 929, 930,
 1386; XIV, 1901; XV, 287,
 1256, 1277, 1278, 1279, 1280
 Cheldelin, V. H., XII, 769
 Čheliadinova, *see* Čeliadinova
 Chemistry and Industry, XI, 374
 Chen, S. L., XV, (1658)i
 Chen, T. M., (1853)h
 Chenery, E. M., XV, 1276
 Cheney, R. H., XIV, 1235
 Cheo, C. C., XV, 1838
 Chepil, W. S., XI, (695); XIII,
 (31)
 Cherian, M. C., XI, 954; XIV,
 594
 Chernov, *see* Černov
 Cheshunt Experimental and
 Research Station, XI, 1024;
 XII, 1575; XV, 373
 Chester, K. S., XIV, 1460; XV,
 362, (1852)k
 Chevalier, G., XV, 1151

AUTHOR INDEX

- Chiarelli, A., XIV, (903)
 Chick, H., XI, 457
 Child, R., XI, 235; XII, 249, 265, 309; XIII, 603; XIV, 1351, (2003); XV, (361), 2058
 Childers, N. F., XI, 1111; XII, 126, 133; XIII, 55, 112; XIV, (1476), 1650; XV, 417
 Childs, A. H. B., XV, 314
 Childs, E. C., XII, (1206); XIII, (1138)
 Childs, J. F. L., XV, 874, 1893
 Childs, L., XIII, 746; XIV, 86
 Childs, W. H., XI, 1131; XIII, 80; XIV, (1567)
 Chilean Nitrate Educational Bureau Inc., XII, 318; XV, 924
 Chinnaras, E., XII, 263
 Chinoy, J. J., XI, (681); XV, (1406)b
 Chisholm, J. S., XI, 90
 Chisholm, R. D., XIV, (635), 663
 Chittenden, E., XI, 69, 71, 254; XIV, 562
 Chittenden, E. T., XV, 742
 Chittwood, B. G., XII, 181, 958
 Cholodnyj, *see* Čolodnyi
 Chopinet, R., XV, 952
 Chopra, I. C., XV, 1927
 Chopra, N. N., XII, 697
 Chouard, P., XIII, (31); XV, 1014
 Choudhury, S. D., XV, 1715
 Chowdhury, S., XIV, 1711; XV, 294, 1287, 1911, 1950
 Christensen, B. E., XII, 769
 Christensen, C. M., XII, 419; XIII, 1622
 Christensen, F. W., XV, 886
 Christensen, J. E., XIII, 754
 Christensen, J. R., XIV, 1621; XV, 571, 1517
 Christiansen, E., XIV, (749)
 Christie, W., XIII, 838
 Christopher, E. P., XI, (779), (821); XII, 137, 408, 1337; XIV, 1542, 1649, 1651
 Chronica Botanica, Editors, XII, 728
 Chubb, W. O., XII, 1137
 Chucka, J. A., XI, 1226; XV, 728
 Chungking, National Agricultural Research Bureau, XII, 325
 Chursoff, *see* Čeršov
 Cieslak, E. S., XII, (1390)
 Ciferri, R., XIII, 793
 Ćirkov, F. V., XV, 408
 Ćirkovskii, V. I., XV, 639, 641 (Citrus Exchange), XV, 251
 Citrus Experiment Station, Lake Alfred, XI, 1318
 Clancy, D. W., XV, (128)
 Clapp, R., XII, 538
 Clapper, R. B., XV, (128)
 Claridge, J. H., XIV, 1952
 Clark, B. S., XI, (1506)
 Clark, C., XII, 808
 Clark, C. C., XIV, 516
 Clark, C. F., XI, (131)
 Clark, D. G., XI, (1073)
 Clark, E. P., XIII, (578)
 Clark, H. E., XI, 245; XII, 1183; XIII, 1552; XIV, 361, 1641; XV, 509
 Clark, J. A., XIII, 712
 Clark, J. H., XI, (1137); XII, 831; XIII, 77; XIV, 1554, (1567); XV, 81, (526)
 Clark, N. A., XI, (661)
 Clark, W. M., XI, 907
 Clarke, A. E., XII, (1390); XIV, (1803); XV, 690
 Clarke, E. J., XIII, 1178, 1429; XIV, 1768; XV, 736, 1170
 Clarke, W. S., Jr., XII, 98
 Clausen, H., XIV, 463
 Clausen, R., XII, 842
 Clausen, R. T., XV, 1954
 Clay, S. B., XI, 460
 Claypool, L. L., XI, (737), 1460; XII, (1195)
 Clayson, D. H. F., XV, 328, (2059)m
 Clayton, B. S., XV, (505)
 Clayton, C. N., XI, 758; XIII, 1262
 Clayton, E. E., XIII, 445, 483, 892, (893); XIV, 686, (1298); XV, 643, 1122
 Clayton, J., XII, 1350
 Cleare, L. D., XV, 815
 Cleghorne, J. W., XII, (39), (1270)
 Clements, H. F., XI, 186, 908
 Clendenning, K. A., XII, (288), 973
 Clevenger, J. F., XIII, (656)
 Clifcorn, L. E., XV, 1327
 (Clifcorn, L. E.), XV, 2048
 Clinch, P. E. M., XI, 1261
 Clopton, J. R., XIV, 705
 Clore, W. J., XII, (833); XIV, 477, 516, 1739
 Close, A. M., XIII, 1113
 Close, A. W., XI, 1130; XII, 534; XV, 464, 762, 1087, 1400
 Clyde, A. W., XIV, 1018
 Clydesdale, C. S., XV, 1146
 Coates, M. E., XIII, 1583; XIV, 1968; XV, 332, 1314
 Cobley, L. S., XIII, 282
 Cochet, C., XIII, 235
 Cochran, F. D., XII, 561
 Cochran, H. L., XI, 461, 1237; XII, 223; XIII, 166, (1500); XIV, 1712
 Cochran, L. C., XIV, 553, 1323; XV, (597)
 Cochran, W. G., XIV, (1030)
 Cockbill, G. F., XII, 390
 Cocker, H. R., XIV, 518
 Cockerham, G., XIII, (874); XIV, (673)
 Coco, G. L., XIII, 1081
 Cocoa and Chocolate (Wartime) Association, XV, 1282
 Cocoa Research Station, Tafo, XIV, 2021
 Coconut Research Scheme, Ceylon, XI, 1023; XIII, 1093; XIV, 1437
 Coe, D. M., XIII, 812; XIV, 492
 Coe, F. M., XI, 625
 Coffee Board of Kenya, XII, 327; XIV, 881, 1892, 2023
 Coffee Research Station, Lya-mungu, Moshi, XI, 1048, 1522; XII, 1582; XV, 388
 Cohen, M., XII, 915
 Cohen, S. S., XII, (1306)
 Coile, T. S., XI, (695)
 Coit, J. E., XI, 877; XII, 573; XV, 259, 790, 1227, 1229
 Colby, A. S., XI, 738; XIII, 1228, 1282; XIV, 93
 Coldwell, A. E., XIII, (67)
 Cole, C. E., XI, 53, 424, 1127; XII, 1263; XIII, (225); XV, (758), 1201
 Colhoun, J., XI, 1232; XII, 1391; XIII, 476, 881; XIV, 199; XV, 627, 628, 1119
 Colker, D. A., XV, 2023
 Collander, R., XII, 20
 Collier, H. C., XIII, 1549
 Collins, C. M., XI, (737)
 Collins, D. L., XIII, (956); XIV, 1627
 Collins, E. R., XII, 832; XIII, (23); XIV, 1864; XV, 519
 Collins, J. C., XI, 497; XIII, (231)
 Collison, R. C., XII, 812; XIV, 94, 1555
 Čolodnyi, N. G., XIV, 999; XV, (34), 963
 Colonial Office, London, XI, 249; XII, 1145; XV, 1259, 1260, 1261
 Colorado Agricultural Experiment Station, XV, 180, 374, 375
 Colquhoun, T. T., XIII, 1106; XV, 212
 Coltescu, I. H., XI, 622
 Colum, J. L., XV, 1233
 Colvin, W. S., XIII, 1115
 Colwell, R. N., XIII, 355
 Colwell, W. E., XIV, 450; XV, 1978, 1979
 Comar, C. L., XI, (1092); XII, (752); XIV, 1177
 Commission Pomologique Romande, XV, 1494
 Committee on Apparatus in Aerobiology, National Research Council, U.S.A., XI, 663
 Committee of Plant Resources attached to the All Union Council of Engineering and Technical Societies, Moscow, XV, (34)
 Common, R. H., XV, (972)
 Commoner, B., XIII, 9, (676); XV, (431)
 Compere, H., XI, (530)
 Compton, O. C., XII, 84; XIV, 61, 1071, 1321, (1545); XV, 482, 1479
 Condit, I. J., XII, 45, (1217); XIII, 43; XIV, 127, 1491
 Congrès National Pomologique, Paris, XV, 1347
 Conin, W., XII, 524
 Conner, J. W., XV, (2059)g

AUTHOR INDEX

- Connors, C. H., XV, 232, (1865)a
 Conrad, J. P., XII, 1251
 Conrad, R., XIV, 1145
 Constantinescu-Ismail, N., XV, 43
 Conway, E., XIV, 146
 Cook, C., XII, 839
 Cook, H. H., XIII, 399; XIV, 34
 Cook, L. J., XIV, 676; XV, 1814
 Cook, O. F., XIII, 608
 Cook, R. L., XII, (1454); XV, 1845
 Cook, R. P., XV, (1185)
 Cook, S. J., XIII, 339
 Cook, W. C., XII, (982); XIV, (290)
 Cook, W. H., XIII, 833
 Cook, W. R. I., XII, 312
 Cook, W. S., XII, 226
 Cooley, J. S., XIII, 106, 244, 816; XIV, 130; XV, 560, 561, 1030
 Coolhaas, C., XI, 561, 1383; XII, 596
 Coomber, H. E., XIII, 447, 1319
 Coombes, A. N., XI, 550, 1438
 Coons, G. H., XIII, (131)
 Cooper, G. J. W., XV, 1860
 Cooper, H. R., XI, 558
 Cooper, H. R., XIV, 339
 Cooper, J. R., XV, 1509
 Cooper, W. C., XI, 846; XIII, 1551; XIV, (14), 1466; XV, 810, 818
 Copeland, O. C., XV, (1914)d
 Copisapar, M., XII, 8, 366; XIII, 436, 867; XV, 113, 579
 Copley, G. H., XIV, 1435
 Corbazz, J., XII, 838, 1247
 Corbett, G. H., XII, 606
 Corbett, W., XIII, 925; XIV, 1758
 Cordner, H. B., XIII, (219)
 Cordy, C. B., XIV, 570; XV, (597)
 Cornford, C. E., XII, 422
 Cornish, E. A., XI, (31), (380); XV, (34)
 Cornman, J. F., XII, 985
 (Cornwall Education Committee), XV, (1312)
 Correa, G., XV, (505)
 Correll, D. S., XV, 1286, 1292
 Cory, E. N., XIII, 1352; XIV, 1684, (1803); XV, 1609, 1610
 Cory, W., XII, (560)
 Cosbie, A. J. C., XII, 675
 Cosmo, I., XI, 704; XII, (1279)
 Cossmann, K. F., XII, 1461
 Costa, A., XII, (587)
 Costa, A. S., XIV, 1128, (1662)
 da Costa, E. W. B., XIV, 1869
 Costa, M., XIII, 1628
 Costa Rica, Centro Nacional de Agricultura, XI, (1054), (1425)
 Coste, A., XV, 1144, 1661
 Coster, C., XI, 175; XII, 251, (603), 619
 Cottrell, G. S., XIV, 2021
 Cottier, K., XII, (982); XIII, 1361
 Cottier, W., XV, 1699
 Cottingham, J., XII, 526
 Cottingham, E., XIII, 594
 Cotton, R. H., XIII, 222; XIV, (268)
 Couch, J. F., XI, (1092); XIV, 2001
 Council of the Horticultural Education Association, XIV, (19)
 Council for Scientific and Industrial Research [C.S.I.R.], Australia, XII, 878, 1146, 1147; XIII, 1039, 1059, 1630; XV, 168, 192, 369, 1348
 Council for Scientific and Industrial Research [C.S.I.R.], Australia, Division of Food Preservation, XIV, 1393, 1423
 Coupin, A., XI, 412
 La Cour, L. F., XIV, 503
 Covas, G., XI, 4; XV, 1517
 Covell, G., XI, 181
 Covington, H. M., XIII, 262
 Cowan, F. T., XIV, (161)
 Cowart, F. F., XII, (85), 1469; XIII, 1190; XIV, (1545); XV, 477
 Cowgill, W. H., XV, 762
 Cowie, D. B., XI, 680
 Cowie, G. A., XI, 1500; XIII, 151, 471
 Cowin, R. E., XV, 444
 Cowling, H., XI, (1092)
 Cox, A. J., XV, 802
 Cox, C. E., XV, (596), 1904, 1905
 Cox, J. A., XIII, 556; XIV, 1622; XV, 1603
 Cox, L. G., XIV, 1805; XV, (431), 1434
 Cox, M. J., XIII, (335)
 Cox, R. E., XV, 899
 Cox, T. R., XIII, 459
 Coyne, F. P., XV, 344
 Crafts, A. S., XIII, (129), 659; XIV, (1030), (1298), 1755; XV, 1655
 Craig, B. M., XIV, 702, 703
 Craig, N., XI, (608); XV, 825
 Crandall, S., XV, 846
 Crane, H. L., XIV, 861
 Crane, J. C., XI, (1137); XIII, (81); XIV, 871; XV, 1236, 1243, 1244, 1245
 Crane, M. B., XI, 11, 1105; XII, 386, 505; XIII, 135, 388, 906, 1102; XIV, 730; XV, 735, 984, 1024, 1165
 Crang, A., XI, 277; XII, 1106, 1131; XIII, 1064, 1080; XIV, 1984, 1985; XV, 2012, (2059)d
 Crasemann, E., XII, 1557
 Crawford, C. L., XII, 1492; XIV, 1948
 Creager, D. B., XIV, (297); XV, 1191, 1192
 Cree, C. B., XIII, 1464
 Creighton, H. B., XI, 1056
 Crépın, C., XV, 1367
 Crispin, A. W., XII, 888; XIII, 1479, 1480; XIV, 313; XV, 1212, 1213
 Crevasse, J. M., Jr., XV, 760
 Crist, J. W., XI, (1092); XIII, (31); XIV, (19)
 Croce, F., XIV, 469
 Croce, F. M., XI, 1124; XII, 679; XIII, 90, 332, (335); XIV, 43, 1082, 1425; XV, 1468
 Croce, M., XV, 42
 Croizat, L., XIV, 874
 Cromer, G. W., XIII, 21
 Cromwell, B. T., XIII, 209; XIV, (1298)
 Crook, E. M., XIV, 1972
 Crosbie-Welsh, T., XII, 684, 1540; XIII, 1595
 Cross, F. B., XIII, 639; XIV, 90, (1662)
 Cross, W. E., XI, 1523; XII, 1033, 1502, 1583
 (Cross, W. E.), XIII, 575; XV, 1365
 Crossley, J. H., XV, 1189
 Croucher, H. H., XI, 240, (248); XII, 268; XIII, 293, 579
 Crous, P. A., XI, 162, 267; XII, 556
 Crowdy, S. H., XI, 1391; XIII, 284
 (Crowdy, S. H.), XIV, 885
 Crowell, I. H., XIII, 1627
 Crowther, E. M., XII, 1200; XIV, 652, 1442
 Croxall, H. E., XI, 787; XII, 928, 959, 964; XIII, 858, 872, 914, 919; XIV, 1734, 1745; XV, 1823
 Croxall, M., XV, (2059)d
 Croxall, R. G., XIV, 1779
 Cruess, W. V., XI, 638, (641), 995, 1469, (1506); XII, 290, 297, (311), 683, 1115, 1125, 1128, 1130, 1541, 1543; XIII, 318, 327, 646, 1051, 1053, (1067), 1592, 1593, 1598; XIV, 373, (387), 933, 935, 1975, 1978, 1996; XV, 341, 898, 902, 1310, 1313, 1325, 1326, 2013, 2035, (2060)e
 Crumb, S. E., XII, 122
 Cruz, P. I., XI, (1506)
 Cruz (Valero), A., XI, 538
 C.S.I.R., see Council
 Cuev, N. V., XIII, 1213
 Culbert, J. R., XII, 195; XIII, (245)
 Culbertson, XIV, 1182
 Cullinan, F. P., XII, 394, 1238; XIII, (45), 1182; XIV, 1631
 Cullity, M., XIV, 806
 Culpepper, C. W., XIV, 372, 931, 1048, 1049, 1666; XV, 514, 1328, 1785
 Cultuurtechnisch Instituut, XI, 935, 1358, 1364, 1393, 1399
 Cummings, K., XIII, 995
 Cummings, M. B., XI, 751
 Cummings, R. W., XIV, 450
 Cunningham, G. H., XI, 1202; XII, 170; XIII, 1317
 Cunningham, H. S., XV, 750
 Cupery, M. E., XII, 1336
 Cupples, H. L., XII, 135
 Curl, A. L., XIV, 928; XV, 149, 908

AUTHOR INDEX

- Currence, T. M., XI, 1247, (1278); XII, 507; XIII, (1445); XIV, (1803); XV, (758), (1852)*v*
- Currier, H. B., XV, (758)
- Curtis, A. F., XIII, 826
- Curtis, A. H., XII, 546, 1459
- Curtis, L. C., XIII, (1573); XIV, 981, 983, 1176
- Curtis, O. F., XI, (1073); XII, 1304
- Cutright, C. R., XV, (1071)
- Cuvaev, P. P., XV, 765
- Cygulev, V. L., XV, 640
- Cyprus Department of Agriculture, XI, 1025, (1526); XIII, (347); XIV, (1455); XV, (391)
- Cytron, B. J., XIV, 1978
- Czerwinski, H., XIV, 191
- Czink, XIV, 1568
- v. D., G., XI, 194*
- Dachnowski-Stokes, A. P., XIII, (1138)
- Dahl, C. G., XII, 785; XIII, 376, 416; XIV, 471; XV, 913
- Daines, R. H., XI, (1229); XII, (864), (1390), 1484, 1485; XIII, 985, (1573); XIV, 1860; XV, 118
- Dainton, B. H., XIII, (129)
- Daji, J. A., XII, (603); XIV, 894
- Dale, W. T., XIV, 869; XV, 290, 291
- van Dalfsen, J. W., XI, 640
- Dallas, W. K., XIV, 1819
- Dam, H., XV, 396
- Dammerman, K. W., XI, 545
- Dana, B. F., XI, (821)
- Dancaster, E. A., XIII, 128
- Daneel, P. de V., XIII, 1224
- Daniels, L. B., XII, 1388; XV, 1026
- Danielson, L. L., XV, 712
- Daniilenko, A. D., XV, 1807
- Dantin Cereseda, J., XV, (972)
- Darkanbaev, T. B., XIV, 1290
- Darke, J. E., XI, 783
- Darling, H. S., XIII, 285, (375)
- Darlington, C. D., XII, 1452; XIII, 236; XV, 2065
- Darlington, H. C., XIII, (785)
- Darlington, H. T., XI, (1079); XII, 882
- Darraha, W. C., XIII, 1110
- Darrow, G. M., XI, 59, 60, (1137); XII, (411); XIII, 75, 76, 796, 1209, 1216; XIV, 533, 1141, (1567); XV, 514, 517, (526)
- Das, C. M., XV, 1435
- Das, G. M., XV, 1242
- Das, N., XIV, 1211
- Das, N. K., XV, 1435
- Das Gupta, S. N., XIV, (1370)
- Das Neves, C. A., XIII, 1006
- Dass, C. M., XI, 607
- Dastur, J. F., XII, 562
- Datta, R. M., XII, 369, (370)
- Datta, S. C., XIII, 1608; XV, 1027
- Daubenmire, R. F., XIII, (1138)
- Davenport, N., XV, 1802
- Davey, A. E., XI, (1235); XII, 1265, 1268
- Davidson, J. A., XI, 802
- Davidson, J. B., XI, 15
- Davidson, J. H., XV, 1465
- Davidson, O. W., XII, (85), 1255; XV, 60, 1023, 1450
- Davies, A. F., XV, (1336)
- Davies, D. L. G., XI, 817; XIV, 1801
- Davies, E. B., XV, 1689, 1921
- Davies, G. N., XI, 687
- Davies, H. J., XIII, (541)
- Davies, H. R., XII, (982)
- Davies, P. G., XIII, 183
- Davies, R., XI, 258, 260, 261, (291)
- Davies, R. O., XII, 1535; XIII, 917; XIV, (673)
- Davies, W. C., XV, (1865)*b*
- Davis, A. C., XII, 879; XV, 757
- Davis, A. R., XII, (1195); XIV, (1030)
- Davis, B. H., XV, 727
- Davis, E., XIII, 299
- Davis, F. F., XV, 1702
- Davis, G. E., XI, 1222
- Davis, G. N., XIV, 739
- Davis, J. F., XII, (1454); XIV, 1786; XV, 1177, 1845
- Davis, L. D., XII, (138), (1246)
- Davis, L. G., XIV, (635)
- Davis, M. B., XI, 720; XII, 368; XIII, 1594, 1599; XV, 1504
- Davis, S. G., XIII, 41
- Davis, W. B., XI, (89); XII, 699, 1138
- Davis, W. C., XV, 846
- Davison, J. R., XII, 404; XIV, 78; XV, 1555
- Dawbarn, M. C., XIV, 1957
- Dawe, C. V., XIV, (1476); XV, 1660
- Dawsey, L. H., XI, 508; XII, 888
- Dawson, C. D. R., XV, 753
- Dawson, R. F., XII, 176, (513); XIII, 481; XV, 155, 659
- Day, D., XII, (180); XIII, 693
- Day, H. G., XV, (2059)*e*
- Day, L. H., XII, 1230; XIV, 1147
- De, S. P., XIV, 1638
- Dean, F. P., XIII, (1329)
- Dean, L. A., XIII, 295
- Dean, R. W., XIV, 1154
- Deasy, D., XII, 1378; XIV, 515
- Deb, S. B., XI, (248)
- Debard, A. S., XII, 580
- Decker, G. C., XIV, 1164
- Decker, K., XIV, 1101, 1112
- Decker, S. W., XIV, 258
- Deeds, F., XII, 1341; XIII, 330
- deEds, F., XIV, 1967
- deFelice, D., XIII, 321
- DeFrance, J. A., XI, (1067); XIV, 1635
- Degen, U., XIV, 923
- Deijs, W. B., XI, 196, (248), (1012); XII, 1141, (1142)
- Delahanty, T. W., XIV, 1535
- Delf, E. M., XIII, 1104
- Delisle, R., XIII, 1572
- DeLong, W. A., XI, (1278)
- Deloustal, J., XV, 1031
- Delwiche, E. J., XIII, (132)
- Demaree, J. B., XII, 865; XIII, 428; XIV, (635); XV, (596), 1033
- Demidenko, T. T., XII, 1407, 1408; XIV, 1229, 1230, 1231, 1232; XV, 649
- D'Emmerez de Charmoy, A., XII, 611
- Demolon, A., XV, 1514
- Dempsey, J. M., XV, 632
- Demusenko, P. M., XV, 1772
- Denham, H., XII, 1310
- Dennis, A. C., XII, 24; XIII, 187; XIV, 1073
- Dennis, R. W. G., XII, 24; XIV, 133, 1073
- Denny, F. E., XII, 283, 285, 1529, 1533, 1534; XIII, 1567, 1568, 1597; XIV, (834), (918), 1950
- Dennys, A. A., XII, 1323
- Denonier, M. T., XV, (758)
- Depardon, L., XV, 1768
- Department of Agriculture, *see under countries*
- Department of Scientific and Industrial Research, New Zealand, XI, 250, 1518; XII, 405; XIII, 344, 1633; XIV, 2025; XV, 2075
- Dermen, H., XI, (1067), (1137); XV, (526)
- Deshmukh, M. J., XV, 619
- Deshpande, R. B., XIII, 1529
- Deshpande, R. S., XIII, 943
- Deshusses, L. A., XI, 453; XII, 838, 1247
- Deslandes, J. A., XV, 1150
- Desrosiers, R., XII, 514
- Detjen, L. R., XIV, 1761; XV, 693
- DeTurk, E. E., XI, 1148; XII, (39); XIII, (1182)
- Deulofeu, V., XV, (1995)*e*
- Devadatta, S. C., XIII, 1578, 1579
- Devonshire, C. R., XV, 1334
- Dewey, B., XI, (641)
- Dewey, L. H., XV, 1930
- Dexter, S. T., XI, 360; XII, 937; XIV, 1463
- Dey, P. K., XII, 1004, (1112)
- Dhadeshwar, S. R., XI, 1447
- Dhawan, C. L., XV, (34), 273
- Diachun, S., XIII, (231); XIV, 1219, 1220
- Diaz-Pacheco, S., XIV, 640
- Diaz y Munoz, J., XI, 537
- Dibrova, P. A., XI, 1095; XIII, 1148
- Dick, A. T., XIII, 1618
- Dick, J., XIV, 631
- Dicker, G. H. L., XV, 105
- Dickey, R. D., XI, 1149, 1296, 1342; XIII, 1487, 1492, 1494; XV, 807, 858
- Dickinson, D., XIII, 1137, 1257, (1620); XV, 1020, (1336), 1577
- Dickinson, R. C., XIV, 1847

AUTHOR INDEX

- Dickson, B. T., XI, 797; XIV, 1244
- Dickson, G. H., XI, 1119; XIII, 385
- Dickson, H., XIII, 314
- Dickson, R. C., XI, 1332; XIII, (246), 559, 1481, 1482
- Diernair, W., XII, (1536)
- Dierick, G. F. E. M., XIV, 1169
- Dieter, C. E., XV, (1185)
- Dietrich, K. S., XI, 121
- Dietrich, W. C., XIII, (1620)
- Dietz, C. F., XIII, (159), 510
- Diez, E., XI, 503
- Dijkman, M. J., XI, 578; XII, 1052, 1499
- Dijkstra, A., XI, (248)
- Diller, —, XV, 333
- Dillon Weston, W. A. R., *see* Weston
- Dills, L. E., XV, (1071), 1153
- Dimitri, M. J., XIV, 299
- Dimock, A. W., XV, (598), 739, 769
- Dimond, A. E., XIII, 1317; XIV, 616, (1184)
- Dinsa, S. H. S., XV, 1872, 1874
- Dippenaar, B. J., XIII, 1247; XIV, 563
- Dirección de Frutas y Hortalizas, Argentina, XIII, (770)
- Dirección General de Agricultura, Guatemala, XI, 356; XII, 1515
- Dirección General de Marruecos y Colonias, XV, 933
- Dirks, B., XII, (367)
- Dirks, C. O., XIV, (1545)
- Ditman, L. P., XIV, (1803); XV, 1697, 1847
- Dittman, A. L., XIII, 644
- Dittman, G., XV, 2027
- Division of Food Preservation, C.S.I.R., Australia, XIV, 1393, 1423
- Dix, I. W., XI, 1139
- Doak, B. W., XI, 1055
- Dobie, J. B., XIII, 1601
- Dobroscky, I. D., XIII, 1300
- Dobrovitskaya, S. A., XI, 514
- Dobrovolskaja, N. N., XIII, 1382
- Dodd, A. H., XIV, 1203
- Dodd, A. P., XI, 774
- Dodds, K. S., XIII, (1032); XIV, 357; XV, (1298)
- Dodge, A. W., XIII, 801
- Dodge, B. O., XIV, 413
- Dodge, F. N., XV, 524, (526)
- Doehrlert, C. A., XI, (1137); XIV, 1548; XV, 1501
- Doermann, M. C., XIII, 1613, (1620)
- Doery, A., XIV, 916
- Dohanian, S. M., XV, 1044
- Doidge, E. M., XI, 864
- Domingo, C. E. XIII, (1138)
- Dominica, B.W.I., Agricultural Department, XII, (1164); XIII, (1638); XV, (391)
- Donald, C. M., XI, (380)
- Doncaster, J. P., XIII, (874)
- Doneen, L. D., XIII, (231); XIV, 645
- Donnelly, M., XII, 234; XV, 1222
- Donohoe, H. C., XIII, 1351, 1564; XIV, 383, 1683
- Doolittle, S. P., XIV, 1109; XV, 702, 1779
- Doran, W. L., XV, 50, 77, 1502
- van Doren, A., XI, 972; XII, 277, 801, 1266; XIII, 1198; XIV, 1940; XV, 68
- Dorfmueller, W., XIV, (1030)
- Dorner, Fr., XIII, (45)
- Dorsey, M. J., XI, 747; XIII, 1191; XIV, 1508; XV, 1467
- Dosdall, L., XI, 1295; XV, 771
- Dostál, R., XIII, 869; XIV, 456
- Dotti, F., XI, 771
- Doucette, C. F., XIII, 544; XIII, 539; XIV, 1813
- Doughty, J. L., XI, 674
- Douglas, F. C. R., XII, 19
- Douglas, H. C., XIII, 1612; XIV, (2003)
- Douglass, J., XIV, 285, 765
- Dow, D., XIV, 1841
- Down, E. E., XIII, 220
- Downer, A. W. E., XII, 291, 1553; XIV, 942; XV, 2018
- Downes, W. F., XV, 1169
- Dowson, W. J., XI, 788; XIII, 1266
- Doyer, L. C., XV, 610
- Dragonetti, J. C., XV, (432)
- Drain, B. D., XIV, 1660; XV, 266
- Dravid, R. K., XI, (248)
- Drayton, F. L., XIV, 1308
- Drechsler, C., XIII, 824
- Dreosti, G. M., XI, (291), 292, 293
- Drew, J. P., XII, 1378; XIV, 515
- Dricot, C., XV, 1784
- Driessen, F. C., XI, (31), (1359)
- Driggers, B. F., XIII, 1292; XIV, 1630, 1655
- Drobkov, A. A., XIII, 502, 535
- Drosdoff, M., XIII, 1492, 1493, 1494; XIV, 1334, 1863
- Drouineau, G., XV, 1381
- Drummond, A. J., XIII, 1103
- Drummond, O. A., XI, (821), 915; XIII, 820; XV, 1567
- Družkov, N. N., XIV, 151
- D.S.I.R. London, XII, 711
- D.S.I.R. New Zealand, *see* Department
- Duarte, A. J., XIII, 1294
- Dubhashi, R. S., XI, 584
- Dublan, J., XV, 1599
- Dubovik, N. V., XIV, 41
- Dubuis, A., XV, 1162
- DuBuy, H. G., XII, (532); XIII, (231); XIV, (161)
- Duchense, J. E., XV, 502
- Ducinin, I. I., XIV, 45
- Ducke, A., XI, 207
- Dudgeon, L. T., XV, (758)
- Dudley, J. E., Jr., XIV, 813; XV, 1067, 1183
- LaDue, *see under letter L*
- Dufour, A., XII, 1218
- Dugand, A., XII, 1016
- Duggan, J. B., XIII, 1253
- Duggar, B. M., XII, 174; XIV, 1131; XV, (598)
- Duhan, K., XV, 476
- Duis, W. H., XI, (1137)
- Duka, S. K., XI, 384
- Duley, F. L., XIII, (1138)
- Dummeier, F. E., XII, 828; XIII, 68
- Dunbar, C. O., XIII, 1157; XIV, 1518
- Dundas, B., XI, 1269
- Dunkelberg, G. H., XIII, 311; XIV, 1858
- Dunkle, E. C., XIV, 653
- Dunlap, A. A., XI, 746
- Dunn, E. E., XI, (1092)
- Dunn, S., XII, 1297
- Dunne, T. C., XI, 977; XIII, 413; XV, 1489
- Dunning, J. W., XV, 1335
- Dunning, R. G., XI, 751
- Dunster, B. P., XII, 409, 533
- D[unster], B. P., XIII, 50
- Durell, W. D., XI, 810
- Durham, G. B., XI, (821)
- Durham, H. E., XII, 286, 1367; XIII, 1056; XIV, 608
- Durivault, G., XIII, 180
- Durrell, L. W., XI, (779); XII, 1329
- Dustan, G. G., XIII, 1347, 1457
- Dustman, R. B., XIV, 402, 521, 1485; XV, 478
- (Dutch East Indies), XII, 236, *see also* Java
- Dutch East Indies, Algemeen Landbouw Syndicaat, XII, 319
- Dutt, B. K., XI, 1416; XIII, 361
- Dutt, J. O., XI, (1229)
- Dutt, S., XI, 570; XII, 688; XIV, 1822
- Dutton, H. J., XIV, 936; XV, 907
- van Duyvendijk, J. A., XII, (1518)
- Dvinianinova, I. L., XIV, (1431)
- Dwyer, R. E. P., XI, 717; XII, 252
- Dyal Singh, XI, 156
- Dyas, E. S., XI, (821); XIV, 201
- Dykstra, T. P., XI, (1229); XIII, 156, (877)
- Dykjy, J., XIV, (14)
- Dykjy-Sajfertová, D., XIV, (14)
- Džidžavadze, S. Š., XV, 268
- Eades, J. A., XV, 539
- Eames, A. J., XIII, 1030; XV, 1434
- Earl, J. C., XI, (501)
- Earley, E. B., XIV, 804
- East African Agricultural Research Station, Amani, *see* Amani
- Easter, S. S., XIV, 859
- East Malling Research Station, XII, 1570; XIII, 1631; XIV, 2020

AUTHOR INDEX

- (East Malling Research Station),
XIII, 772
- Eastwood, H. W., XI, 244, 601,
602, 1435; XII, 645; XIII, 990
- Eastwood, T. M., XV, 1693
- Eaton, E. L., XIV, 532
- Eaton, F. M., XI, 665, 728, 1071;
XII, (39), 1191; XIII, 1132;
XIV, (458); XV, 414
- Eaton, S. V., XI, (1092); XII,
1406; XIII, 494; XIV, 1715
- Eaves, C. A., XII, 434
- Ebeling, W., XI, 1336; XII, 1006,
(1480); XIII, 554; XIV, 854,
1174; XV, 1211, 1644
- Eberhardt, H., XIII, 286
- Ebright, V. R., XI, 108
- Echeverria, J., XIV, 109
- Eckert, J. E., XV, 475
- Economics Branch Dep. Agric.
S.S. & F.M.S., XII, 715
- Eddins, A. H., XII, 156; XV,
(758), (1852)
- Eden, T., XI, 193, 921; XII,
(273), 614, 615; XIII, 590;
XIV, 1889; XV, 277, 1932
- (Eden, T.), XIII, 1511
- Edgcombe, S. W., XIV, 36
- Edgerton, L. J., XII, 1266; XIII,
(1138), 1198; XV, 1450
- Edholm, H., XIV, 912
- Edinburgh and East of Scotland
College of Agriculture, XI,
1026; XII, (1584)
- Edisbury, J. R., XIV, (412)
- Editor, Fruitgrower, XIV, 1115;
XV, 115
- Editor, Fruktdolaren, XV, 1045
- Editor, Tropical Agriculturist,
XI, 1429
- Editors, Chronica Botanica, XII,
7, 28
- Edelesen, N. E., XIII, (375)
- Edmond, J. B., XIII, 311; XIV,
1857, 1858, 1859
- Edmonds, H. T., XV, 491
- Edmonton, W. E., XV, 1059
- Edwards, F. R., XII, (311)
- Edwards, H. T., XIV, 873
- Edwards, K. B., XIII, 448
- Efeikin, A. K., XII, 1199
- Eggers, E. R., XI, 734, 854; XII,
206; XIII, 729, 993; XV,
(1232)
- (Eggers, E. R.), XIV, 1870
- Eggers, V., XII, 173; XIV, (458)
- Eggert, R., XV, 540
- Egglhuber, E., XIV, 198
- Egler, F. E., XIV, 979
- Eheart, M. S., XIII, 905
- Eichmann, R. D., XIII, 1455;
XIV, 1740, 1953; XV, 1792
- Eide, C. J., XII, (158), 419
- Eide, P. M., XII, 122; XIII, 1344;
XIV, 1813
- Eidt, C. C., XII, 1120; XIV, 532;
XV, 97, 1409
- Eihfeljd (Eichfeld), I. G., XV, 602
- Eikema, J. S., XII, 253
- Èire, Minister of Agriculture,
XI, (1054); XII, (337); XIII,
(347); XV, (946)
- Eisenmenger, W. S., XIII, 1115;
XV, 1730
- Ejercilo, J. M., XI, 1422
- Ekinci, A. S., XI, 483
- Ekstrand, H., XIII, 1326; XIV,
187
- Ekstrom, V. A., XIII, 768; XIV,
527
- Elazari-Volcani, Z., XV, (1071)
- El Azoumi, M. M., XI, 849
- van Elden, H., XII, 1348; XIII,
454; XIV, 1188
- Eliodoro Lembo, F., XV, (83)
- Ellenwood, C. W., XII, 56;
XIII, 1195
- Ellet, C. W., XV, 751
- Elliot, H. G., XIV, 806
- Elliott, A. G., XII, 529
- Elliott, C., XIV, (635)
- Elliott, I. L., XIII, 393
- Ellis, G. H., XIII, 1420
- Ellis, N. K., XIII, 150, (231);
XV, (758), 1721
- Ellis, W. J., XIV, 396
- Elmer, L. A., XII, 1500
- Elmer, O. H., XII, 922
- Elmore, J. C., XIV, 267, 1225
- El Shishiny, H., XV, 685
- El Taher, N., XII, 1212
- Elttinge, E. T., XI, 480
- Ely, R., XII, (295)
- Elze, D. L., XII, 1436, 1464, 1470
- Embree, J. J., XIV, 17
- van Emden, J. H., XI, 192, 557,
918, 1374
- Emel'janov, I. E., XIV, 184
- Emerson, R., XIII, 355
- Emerson, R. L., XIV, 986
- Emery, W. B., XIV, (1431)
- Emmert, E. M., XIII, (1138);
XIV, (1476), 1767; XV, (432),
1167
- Emsweller, S. L., XIV, (297)
- Endrinal, D. M., XI, 481
- Engelmann, C., XII, (513), 926
- Engels, O., XIV, (543)
- Engledow, F. L., XII, 725
- Englis, D. T., XII, (1560)
- English, H., XI, 971; XII, 1526;
XIII, 1560; XIV, (379)
- English, L. L., XI, 1330; XIV,
831, 1809, 1810
- Engstedt, G., XIII, 1072; XIV,
(528); XV, 437, 897, 1301,
1318, 1422, 2042
- Enikeev, Kh. K., XII, 797
- Enlow, C. R., XII, 359
- (Entomological Club of Southern
California), XV, 801
- Enzie, J. V., XIV, 88; XV, 493
- Epimov, N. I., XIV, 1028
- Epstein, E., XIII, 1254
- Epstein, J. A., XV, 425
- Erenburg, P. M., XIV, 435, 743
- Ergle, D. R., XV, 632
- Erickson, F. J., XI, 309
- Erikson, D., XV, 1571
- Eriksson, S., XIV, (19)
- Erljman, M., XV, 1377, 1528
- Ermolaev, E. J., XV, 202
- Ermolaeva, N. I., XII, 971
- Erwin, A. T., XI, 1230
- Esau, K., XI, 362, 466, (1287);
XIII, 683; XIV, (1803)
- Esbjerg, N., XIV, 907
- Esdorn, I., XIV, 1333
- Eskew, R. K., XV, 896, 2023
- Esselen, W. B., XI, 285
- Esselen, W. B., Jr., XII, (1142);
XV, 881, 895
- Essig, E. O., XII, 1321; XV,
(1852)m
- Etchandy, A. M., XIV, 1382, 1385
- Etchecopar, J. A., XIV, 1714
- Etchells, J. L., XIV, 376
- Etlinger-Talczyńska, R., XII, 1470
- Eustace, H. J., XII, 788
- Evans, A. C., XII, 164, 915, 1366;
XIII, (947)
- Evans, A. W., XI, 1158, (1174);
XIV, (635)
- Evans, G., XI, 1400; XII, 1145;
XIV, 188; XV, 1108
- Evans, H. H., XII, 163, 167; XIV,
1079
- Evans, J. A., XI, 769; XIV,
(1184)
- Evans, J. W., XIII, (845); XV,
1537
- Evans, M. C., XV, 1933
- Evans, R. E., XIII, (1138)
- Evans, S. T., XI, (380)
- Evenari, M., XIII, 689
- Evenden, W., XIV, 1104
- Evinger, E. I., XI, (1137)
- Evreinoff, V. A., XIII, 44; XV,
975, 986
- Evtusenko, L. J., XII, 835
- Ewart, W. H., XIV, 1737
- Ewert, J., XIV, 1064
- Ext, W., XII, 1389; XIV, 708
- Eyster, H. C., XIII, 686
- Ezell, B. D., XIII, 391
- Faberge, A. C., XIII, 386
- Fabian, F. W., XI, 309; XII,
1551; XIII, 1068, 1069, 1614;
XIV, (1431), 1997, 1998;
XV, 1332, 1333
- Faes, H., XI, (779); XII, 1097,
1154; XIV, 1107
- (Faes, H.), XIV, 1441
- Fagan, F. N., XIV, (1662)
- Fagan, T. W., XIII, 917; XIV,
(673)
- Fahey, H. N., XI, 172, 1305;
XIV, 330
- Fahey, J. E., XIII, (451), 1299,
1302; XV, (1071)
- Fairbank, J. P., XIII, (1138)
- Fairchild, D., XI, 943, 944
- Fairchild, R. E., XI, 149
- Faithful, W., XIII, 475
- Fallscheer, H., XI, 433; XII, 891
- Faram, C. H. C., XII, 187
- Farfan, F. T., XIII, 280
- Faria, F. R., XIII, 1534
- de Faria, G., XV, 826
- Farkas, A., XIII, 1046
- Farmers' Club, London, XV,
1341
- Farquharson, J. D., XI, 1410

AUTHOR INDEX

- Farrar, J. L., XI, 2, 335, 336, 337, 338, 1060; XII, 2, (351), 756
 Farrar, M. D., XI, 762
 Faulkner, O. T., XV, 272
 Faulkner, R. P., XIII, 212, 854; XIV, 1200
 Fauvel, H., XI, 1304
 Fauvel, J. H., XIV, 1021, 1314, 1315
 Fawcett, G. L., XI, 1321; XIII, 427
 Fawcett, G. S., XIV, 2007
 Fawcett, H. S., XI, 155, 422; XII, 846, 1003, 1143; XIII, 257; XIV, 308, 309, 1322, 1323, 1639, 1837, 1839; XV, 253, 256, 792, (1914)b
 Fawcett, K. I., XV, (2011)b
 Fazal-ud-Din, XIII, 1434
 (Fearon, W. R.), XIV, 920
 Featherby, H. G., XII, 540
 Fedčenko, B. A., XIII, 1485; XIV, 1237; XV, 1372
 Fedcenko, I., XV, (74)
 Federer, W. T., XV, 1744
 Fedin, A. H., XI, 515
 Fedorov, S. I., XII, 761
 Fehmerling, G. B., XI, 862
 Feilden, G. St. C., XI, 330
 (Felber, I. M.), XIV, 1019
 Felber, I. M., XIV, 1468; XV, 763
 Fellers, C. R., XI, 285, 303, (984), 1494; XII, (1142); XIII, 1453
 Fells, C. V., XII, 1445
 Felt, E. P., XV, 914
 Fenjves, P., XIV, 1152; XV, 1605
 Fennah, R. G., XI, 1327; XII, 1007; XIII, (347), 546
 Fennell, J. L., XI, 1138; XV, 1523
 Fenton, E. W., XII, (1333)
 Fenton, F., XIV, 1977, (2003)
 Fenton, F. A., XV, 106
 Ferguson, F. F., XI, 350, 668
 Ferguson, S. W., XI, 1151
 Ferguson, W., XII, 986
 Fernandes e Silva, R., XV, 808, 842, 851, 852, (1185)
 Fernando, M., XI, 191, 916, (965), 1394; XII, 248, 271; XIII, 622; XIV, 345, 732, 875, 900; XV, 1952
 Fernholz, D. L., XII, 228, 1489, 1490; XIII, 1491
 Ferrand, M., XIII, 607
 Ferreira, R. da C., XV, 285
 Ferres, H. M., XIV, 1110
 de Feu, S. H., XV, 715
 Feustel, I. C., XIII, 369
 Fey, W., XIV, (92)
 Fidler, J. C., XII, 1099
 Fidler, J. H., XI, 107
 Field, C. P., XII, 421, 1286
 Field Officers, Division of Plant Industry, N.S.W., XII, 360
 Fields Division, New Zealand Department of Agriculture, XI, 30
 Fiess, H. A., XII, (1560)
 Fife, J. M., XIII, 700
 Fifield, W. M., XI, (891), 1225
 Figueres, R., XV, 1251
 Fiji Department of Agriculture, XII, (723)
 Filewicz, W., XI, 748
 Filinger, G. A., XI, 711, 739; XII, 100, (462); XIV, (1545), 1934
 Filippello, F., XII, 302
 Filippishin, I. S., XII, 458
 Filippov, D., XV, 1134
 Filippov, D. I., XII, 1061
 Filmer, R. S., XII, (1236); XIV, 1682
 Filov, A. I., XII, 1427, 1441
 de Fina, A. L., XIV, 701
 Finch, A. H., XII, 207; XIII, 136; XV, 783, 785, 1198
 Fincke, M. L., XI, 288
 Fink, H., XIV, (412)
 Finney, D. J., XI, (1187); XII, (462), 915, (1347); XIII, 1175, 1176; XIV, (635)
 Fischbach, H., XV, (1336), 2031
 Fischer, E., XII, 530
 Fischer, H., XII, 348; XIV, 1246
 Fischer, H. E., XI, (1137)
 Fischer, R., XIV, 281
 Fish, V. B., XIV, 1485, 1939; XV, 478
 Fisher, C. D., XII, 1126, 1537
 Fisher, D. V., XI, 402, 732; XII, 660, 1519, 1520; XIII, 1259, 1557; XIV, 17, 511, 1376, 1380
 Fisher, E., XII, 227
 Fisher, J. W. D., XI, 173
 Fisher, P., XV, 127
 Fisher, P. L., XI, 1308; XIII, (260)
 Fisher, R. A., XI, 440
 Fisher, W. I., XV, (758)
 Fishman, M. M., XIII, (697)
 Fiske, J. G., XIV, (1662)
 Fitzgerald, G. A., XI, 285
 Fitzpatrick, R. E., XII, 104; XV, 96
 Fjäderhane, M., XII, 782
 Flachs, K., XIV, (819)
 Flanders, S. E., XIII, (562), 1478; XIV, 1873
 Flanzv, M., XV, 2054
 Fleck, E. E., XV, 1058
 van Fleet, D. S., XIII, 358
 Fleming, W. E., XIV, 1338
 Flemion, F., XI, 669; XIII, 537; XV, 996
 Flenner, A. L., XII, (1347)
 Fleischner, C. A., XIV, 1655
 Fletcher, H. R., XV, 1855
 Fletcher, L., XII, 941
 Flint, L. H., XIII, (20)
 Flint, W. P., XI, 738, 762
 Floor, J., XII, (1217); XV, 518
 Flor, H. H., XIV, 1688
 Florey, H. W., XIV, 434
 Florida Agricultural Experiment Station, XV, 930, 931, (946)
 Flory, W. S., Jr., XIV, 505; XV, 494
 Floyd, W. W., XI, 281, (291)
 de Fluiter, H. J., XII, 258, 625
 Fluno, H. J., XV, (1658)p
 Fogel, XIII, (676)
 Foglia, A. E., XI, 693; XV, (432)
 (Foister, C. E.), XIII, 813
 Foister, C. E., XIII, 1264, 1355
 Foley, E. J., XV, 425
 Folsom, D., XII, (982), (1390); XIII, (877)
 Fontaine, T. D., XIV, 2000
 Foot, A. S., XII, 1559
 Foote, F. J., XV, 1877
 Forbes, A. P. S., XI, 166; XV, 791
 Forbes, E. B., XI, 1090
 Ford, C. E., XI, 938; XII, 1058; XV, 1959, 1960, 1968
 Ford, E. S., XIII, (545)
 Ford, J. H., XII, (1347)
 Ford, J. S., XII, 941, (982)
 Ford, O. W., XI, 436, 1120
 Ford, T. F., XV, 1973
 Fordham, R. D., XIII, (541); XIV, 1336
 Forgacs, J., XIII, 1074; XIV, 1409; XV, 2047
 Forsberg, J. L., XV, 224
 Forschungsgemeinschaft, Magdeburg, XII, 669
 Forsell, M. J., XV, 1579
 Forsyth, D. D., XIV, 197; XV, 1116
 Fortier, H., XII, 403
 Foster, A. C., XI, 1258, 1259
 Foster, H. H., XIII, 890; XV, (598)
 Foster, L. T., XIV, (325)
 Foster, R. E., XV, (598)
 Foster, R. G., XIII, 1509
 Pothergill, L., XIII, 237
 Fotidar, M. R., XI, 1179
 Foulon, L. A., XI, 790
 Fournment, XV, 1735
 Fournier, P., XV, 1001
 Fox, D. H., XV, 630
 Fox, F. G., XV, 1882
 Frahm, E. E., XI, (661)
 Frahm-Leliveld, J. A., XI, (248)
 Frampton, V. L., XIII, (101), (231); XV, (598)
 France, J. G., XI, 873; XV, 1222
 Francis, E. H., XII, (462)
 Francis, T., Jr., XIII, (219)
 Francisco Franco, O., XIV, 714
 Franck, J., XI, (31); XII, (752)
 Franklin, A. H., XIII, (947)
 Franklin, H. J., XII, 830; XIV, 102
 Franssen, C. J. H., XII, (1518)
 Fraps, G. S., XI, 281, (291), 379; XII, 819, 1193; XIII, 395
 Fraser, H., XII, 482, 1261
 Fraser, J. G. C., XIII, 138
 Fraser, L., XIII, 255, 256
 Fratzke, W. E., XIII, 205
 Frazier, J. C., XIII, 692, (836); XIV, 609, (635), 1163, 1634; XV, (431), (1185)
 Frazier, N. W., XV, (598)
 Frazier, W. A., XIV, 363
 Freak, G. A., XIII, 439

AUTHOR INDEX

- Frear, D. E. H., XI, 777; XII, 1346; XIII, 1286; XIV, 71, 615; (1662); XV, 1069, (1071), 1153
- Free, M., XI, 1291
- de Freitas, A. G. B., XIII, 1219; XV, 1520
- French, A. P., XII, (833), (1246); XIII, 1156; XIV, 1486; XV, 981, (1535)a
- French, B., XIII, 172
- French, C. S., XV, (1406)e
- Fresa, R., XIV, 582; XV, 1580
- Frey, W., XIV, 708
- Frey-Wyssling, A., XIV, 1741
- Frézal, A., XV, 1162
- Frezel, —, XV, 1586
- Frezzi, M. J., XI, 526; XIV, 845, 846
- Friar, H. F., XIII, 1060, 1066, (1067), (1603); XIV, 935; XV, 901, 1326, 2037
- Frick, L., XV, 1858
- Fricke, E. F., XIV, 611
- Fridström, A., XIII, 725
- Frieden, E. H., XIV, 1406
- Friedlander, E. M., XIII, 18
- Friedman, B. H., XIII, (219)
- Friedrich, H., XI, (101); XII, 342; XIV, 11
- Friedrichs, G., XI, (101)
- Friedrichson, G. A., XIV, 136
- Friend, A. H., XV, 740
- Friend, W. H., XI, 662, 848, 1303; XII, 1495; XIII, (956)
- Friesen, G., XIII, 29
- Frimmel, F. v., XIV, 771
- Frith, F. H., XIV, 1834
- Fritzsche, R., XV, 1448, (1535)b
- Froggatt, J. L., XI, 236, 1430
- Frolik, E. F., XIV, 1187
- Frolov, I., XV, 1668
- Frömel, W., XIV, (458)
- Fromm, F., XIII, 582
- Frost, H. B., XI, 140; XIV, 1318; XV, 1195
- Frost, S. W., XIII, 110
- Fry, J. M., XIII, 184
- Fryer, J. C. F., XII, 915
- Fuchs, W., XIII, (1620)
- Fuchs, W. H., XIV, 567, 807
- Fudge, B. R., XI, 862
- Fudge, J. F., XI, 379; XII, 1193
- Fuelleman, R. F., XV, 178
- Fuller, H. J., XII, 1196
- Fuller, J. E., XI, (301)
- Fulling, E. H., XIV, 129
- Fulmer, E. I., XI, (1506)
- Fulton, B. B., XIV, 1744
- Fulton, C. C., XII, 707
- Fulton, C. O., XV, (2059)f
- Fulton, J. P., XIII, 186
- Fulton, R. A., XII, 1479; XIII, (562); XIV, 856; XV, 1210, (1232)
- Fulton, R. W., XI, 1214; XIII, (231); XIV, (161)
- Funck, E., XII, 1548
- Funcke, H., XV, (1853)i
- Furkova, N., XV, 207
- Furlong, J. R., XIII, 654
- Furnstal, A. H., XI, 666
- Furr, J. R., XII, 209; XV, 1729
- Furtado, C. X., XII, (273)
- Furtauer, XI, 407
- Gadd, C. H., XI, 197, 1368, (1379); XII, 617, 1036; XIII, 591, 1514; XIV, 877, 1890; XV, 278, 1935
- Gaebeler, A. A., XIII, (770)
- Gagnard, J., XIII, 788
- Gahan, J. B., XIV, 1645; XV, 1061
- Gahlback, J., XII, 1203; XIV, 8
- Galkin, K. A., XIV, 723
- Gall, D. C., XII, 772
- Galston, A. W., XV, (431), 670
- Gamajunova, A. D., XV, 654
- Gambia Department of Agriculture, XI, (1054), (1526); XIII, 341
- Gans, L., XIV, 1751
- Garavel, L., XIII, 415
- Garber, K., XV, (758)
- Garcia, C. R., XIV, 1275, 1765
- Garcia, D. A., XIV, 469, (1083)
- Garcia, G. M., XI, 1418
- Garcia Rada, G., XIV, (1803)
- Garcia Romero, A., XV, (972)
- Garcia de los Salmones, N., XV, 1016
- Gardner, C. A., XI, 1239
- Gardner, E. J., XV, 663
- (Gardner, F. E.), XII, 77
- Gardner, F. E., XIV, 14
- Gardner, M. W., XIV, 1731
- Gardner, R., XIII, 1252; XV, 39
- Gardner, V. R., XII, 1562; XIV, 1468; XV, 442, 443, 497, 498, 1466
- (Gardner, V. R.), XIV, 1019
- Garman, P., XIII, 1285
- Garmendia, L. I., XII, (587)
- Garner, F. H., XIII, 1447
- Garner, H. V., XI, 16, 1224; XII, 150; XIII, 467; XIV, 76
- Garner, R. J., XII, 379, 1222; XIII, 387, (732), 1161; XIV, 502, 967, 1502; XV, 1431, 1442, 1568, 1687
- Garner, W. W., XI, 21; XII, 17; XIII, (131)
- Gargoglio, P. G., XIV, 939
- Garrard, E. H., XV, (2059)g
- Garrard, G. H., XII, 914
- Garren, K. H., XIV, (19)
- Garrett, S. D., XV, 915, 1573
- Garrow, J. D. P., XI, 1271
- Garruaza, A. M., XV, 145
- Garstka, W. U., XII, (736)
- Gauch, H. G., XIII, (1454); XIV, (834), 1281; XV, 666, 1176
- Gault, L., XIV, (1030)
- Gäumann, E., XIV, (834)
- Gavrilov, K. I., XII, 741; XIV, 998
- Gavrilov, N. I., XII, 775
- Gayford, G. W., XIV, 1532
- Gaylord, F. C., XIV, 377; XV, (758), 1788
- Gayner, F. C. H., XI, 1108, 1109, 1110; XII, 1245
- Gaywala, P. M., XIII, 604
- Geddes, W. F., XV, (758), 1305
- Geering, J., XIV, 1020
- Gehlsen, C. A., XI, 583
- Geiger, A., XIV, 937
- Geiger, R., XIV, (458)
- Geissler, G. H., XI, (1192)
- Gelinck, A. M., XII, 1039
- Gemmell, A. R., XIII, 876
- Genter, C. F., XI, 484
- Georgi, C. D. V., XII, 651
- Georgia Agricultural Experiment Station, XII, 326; XV, 1349, 2074
- Gerasimov, V., XV, 1098
- Gerassimov, see Gerasimov
- Gerassimova, H., XII, 1414
- Geribaldi, C., XI, 703, 719, (984)
- Gerhardt, F., XI, 619, 971; XII, 1526, 1530; XIII, 391, 1560; XIV, (379)
- Gericke, S., XII, 466, 476, 1403; XIV, 803, (834), 1023, 1674; XV, 1680
- Gericke, W. F., XV, 951
- Germ, H., XI, 468; XIV, 279, 1252
- Gerritz, H. W., XII, (708); XIII, 1590
- Gertler, S. I., XV, 1046
- Gescher, N. von, XIV, 904
- Geslin, H., XV, 1514
- Gethin-Jones, G. H., XII, 623
- de Geus, J. G., XI, 174, (965)
- Geyer, J. W., XII, 130
- Ghani, M. O., XIII, 1007
- Ghilarov, M. S., see Gilarov
- Ghosh, S. M., XII, 1339
- Gibberd, A. V., XI, 223; XV, 303
- Gibbs, J. G., XI, 1241
- Gibbs, R. D., XII, 776
- Giddings, N. J., XV, (227)
- Gieger, M., XII, 705
- Gier, L. J., XI, 500; XV, (431)
- Giesecke, F., XI, 125; XII, (414)
- Giffit, H., XIV, 1977
- Gik, Y., XV, 884
- Gilarov, M. S., XII, 1417, 1418; XIV, 1241; XV, 674
- Gilbert, S. G., XI, 349; XII, 746, (982); XIII, 77; XV, 402
- Gilbert, S. M., XV, 282, 834, 1936
- Gile, P. L., XIII, 369
- Giles, J. E., XV, 1672
- Giles, W. F., XI, (1244); XIII, 519, 528, 913, 1404; XIV, (1186), 1663; XV, 133, 203
- Gillam, W. S., XIV, 1769; XV, 724
- Gillespy, T. G., XI, 1470, 1478; XIII, 307
- Gillet, S., XIV, 340
- Gillett, S., XI, 204; XII, 1508; XIII, 593; XV, 830, 831
- Gillies, J., XI, 99
- Gilliland, J. R., XIII, 1612
- Gilliland, R., XIII, 327
- Gilman, J. C., XV, 1342

AUTHOR INDEX

- Gilmore, J. U., XIV, 1705
 Gilson, M. R., XII, 921
 Ginal, M. A., XIV, 478
 Ginsburg, J. M., XI, 1191; XII, 1344; XIV, 626
 Girdhari, L., XV, 903
 Girtton, R. E., XII, (39)
 Giscalfé, L., XIII, (706)
 Gisiger, L., XIV, 1005
 Glaenzer, B., XV, 1003
 Glanville, R. R., XI, 173
 Glasgow, R. D., XIV, 1642
 Glass, E. H., XV, (1658)j
 Glasscock, H. H., XI, 816; XII, 186; XIII, 477, 1452; XIV, 254, 785, 1789; XV, 214, 1172
 Glasstone, V. F. C., XII, 739, (982)
 Gleditsch, E., XIII, 931
 Glegg, C. G., XV, (865)
 Gleisberg, W., XV, 1440
 Glen, R., XIV, 664
 Glenister, P. R., XV, 650
 Glick, D. P., XII, (1390)
 Glock, W. S., XII, 353
 Glöckner, G., XII, (480)
 Gloria, P. E., XI, 946
 Glotov, V., XII, 758
 Glover, J., XI, 348
 Glover, L. C., XIII, 126
 Gluščenko, I., XV, 620, 1113
 Godar, E., XIV, (1030)
 Godard, M., XV, 1399
 Godfrey, G. H., XIV, 657
 Godoy, E. F., XIV, 697
 Goffart, H., XII, 1389; XIV, 708
 Gogalniceanu, S. M., XI, 622
 Gogvadze, I. L., XI, 858
 Gökgöl, M., XIV, 1457
 Gokhale, V. N., XII, (603)
 Goldberg, L., XI, 1495; XIV, 1962
 Gold Coast, Ashanti, Department of Agriculture, XV, 368
 Gold Coast, Central Province, Department of Agriculture, XV, 377
 Gold Coast Department of Agriculture, XI, 1027, 1514; XIII, 342; XIV, 1438; XV, 932
 Gold Coast, Eastern Province, Department of Agriculture, XV, 376
 Gold Coast, Western Province, Department of Agriculture, XV, 378
 Golding, E. W., XIII, 143
 Golding, F. D., XI, (566), 1392
 Goldman, S., XIV, 1656
 Goldsworthy, M. C., XIII, 121, 843; XV, (596), 1833
 Gole, H. V., XIV, 1560
 Goletian, G. I., XI, 922
 Golitsyn, S. V., XV, 239
 Golle, V. P., XII, 1407, 1408; XIV, 1230, 1231, 1232
 Gollmick, F., XII, 1275; XIII, 797; XIV, 1100
 Goloborodjko, E. F., XIV, 667
 Golubinski, I. N., XIV, 1222; XV, (1852)q
 Gomes, P., XV, 857
 Gómez, L. A., XII, 245; XIII, 1013; XV, 833
 Gómez-Moreno, M. L., XV, 843
 Gomoljako, L. G., XIII, 71
 Goncalves, C. R., XI, 158
 Gončarov, A. G., XV, 175
 Gonzalez, H., XI, 633
 Gonzalez, L. G., XI, 946
 Gonzalez Gomez, C., XV., 1724, 1777, 2055
 Goodall, D. W., XI, 117; XII, 504; XIII, 1248; XV, 531, 1166
 Gooden, E. L., XIV, (635)
 Goodey, T., XV, 1763
 Goodhue, L. D., XII, 1340; XIV, 1273, 1620, (1662); XV, 1697, 1698, 1762
 Gooding, E. G. B., XII, 1034
 Goodspeed, T. H., XIII, (1369), 1379
 Goodwin, M. W., XIV, 1180
 Goodwin, R. H., XI, (1073)
 Goodwin-Wilson, R., XV, 1081
 van der Goot, P., XI, 184, (965)
 Göppert, B., XII, 1365
 Gorbovsky, A. G., XIV, 999
 Gordon, S. A., XIII, (367)
 Gordon, W. E., XII, 1336
 Gore, U. R., XI, 744; XII, 576
 Goraiinov, M., XV, 1136
 Gorjainov, *see* Goraiinov
 Gorostiaga, A., XV, 1870
 Gossard, A. C., XI, 742; XIII, 1231; XIV, 113, 1564
 Gossweiler, J., XIV, (1370)
 Gottlieb, D., XIII, 933, (1283); XIV, (161), 1279, 1778
 Gottwick, R., XI, 124, 520
 Götz, B., XV, 1607
 Gough, H. C., XII, 915, 1366
 Gould, C. J., XIV, (1816); XV, (597)
 Gould, E., XI, (1192)
 Gould, G. E., XV, 1797
 Goulden, C. H., XV, (972)
 Gourley, J. H., XI, 1507; XIV, 74
 Goyco, J. A., XIII, (656)
 de Graaff, D., XI, 1380
 Grace, N. H., XI, 1, 2, 3, 334, 335, 336, 337, 338, (347), 658, (661), 1059, 1060; XII, 2, (351), 756; XV, 677, 1405
 Graf, T., XIII, 931
 Graham, C., XV, 1621
 Graham, E. R., XII, (752); XIII, (697)
 Graham, L. T., XI, 434; XV, 1065
 Graham, R. J. D., XII, 239; XIV, 452
 Grahle, A., XII, 686
 Grainger, J., XI, 646; XIV, 1067
 Gram, E., XIII, 419, 862
 Grandori, R., XII, 1322
 Graner, E. A., XI, 1366; XII, (273), (587); XV, 827
 Granovsky, A. A., XV, (1185)
 Grasby, C. G., XIV, 552
 Graves, A. H., XIV, (1298)
 Graves, H. C. H., XII, 292
 Gray, G. F., XII, 410, (1296)
 Gray, L. V., XI, 241
 Gray, N. E., XII, 1196
 Gray, P. H. H., XI, 664
 Gray, S. G., XIII, 192, 1407
 Grayson, J. M., XIV, 1706
 Greatorex, F. J., XI, 41; XII, 46
 Greaves, J. E., XIV, 1695
 Greaves, T., XV, 1775
 Grebinskii, S. O., XIV, 685; XV, 1392
 (Grebinskii, S. O.), XIII, 360
 Grečuhin, E. I., XIV, 1209
 Green, A. A., XIV, (161)
 Green, D. E., XI, 96, 443, 510, 813, 1211; XII, 147, 467; XIII, 461, 657, 936; XIV, 586, 658, 1114, 1257, 1578; XV, 196, 1171
 Green, E. C., XI, 552; XII, 237
 Green, E. L., XIII, 121, 843
 Green, S., XV, 1753
 Greene, L., XIV, (92)
 Greenham, C. G., XII, (1333)
 Greenhill, W. L., XV, (2059)h
 Greenslade, R. M., XI, 764, (1177), 1181, 1182, 1188; XV, 1604
 Greenway, P. J., XI, 571, 936, 1397, 1414; XII, 610, 1068; XIII, 655; XV, 1915
 Greenwood, M., XIV, 2021
 Greer, S. R., XIII, 1490
 Grego, A., XII, (587)
 Gregory, G. B., XIII, 270
 Gregory, J. H., XIV, 171, 1371, 1372, 1933
 Gregory, L. E., XV, 1441
 Gregory, P. H., XI, 137; XIII, (874)
 Greig, A. M. W., XII, 549; XIII, 776; XIV, 842, 1313
 Grène, G., XIII, 648
 Greulich, V. A., XII, (752); XV, 1391
 Greve, E. W., XIII, 736, 1040, 1167
 Gribbins, M. F., XI, (1287); XV, 355
 Gries, G. A., XIV, (547)
 Griesinger, R., XII, 1387
 Grieve, B. J., XIV, 264, (297); XV, 682
 Griffith, M., XI, 87
 Griffith, R. B., XIV, 1971; XV, (758)
 Griffiths, A. E., XII, 498; XIII, 136, 193, 1409
 Griggs, W. H., XI, (737); XII, 1234
 Grigor'ev, I. J., XII, 1209
 Grigsby, B. H., XV, 1700, 1701
 Grikhutik, M. I., XI, 1218
 Grimaldi, A., XII, 799
 Grimbail, P. C., XV, 694
 Grimmett, R. E. R., XIII, 500
 Grindley, D. N., XV, 359, (2059)i
 Grininger, M. P., XIV, 841
 Grist, D. H., XI, 1035, 1371; XII, 313
 Griswold, H. B., XV, 1304

AUTHOR INDEX

- Griswold, R. M., XI, 614; XV, 2030, (2059)
 Grizzard, A. L., XII, (982)
 Grogan, R., XIII, 218
 Groh, H., XI, 36
 De Groof, G., XV, (34)
 (Gross, E.), XIV, 65
 Gross, E., XIV, 922
 Grosse, B., XI, 381; XII, 392
 Grossheim, A. A., XIV, 1718
 Grottodden, O., XV, 1667
 Grove, L. C., XI, 134
 Groves, A. B., XIV, 614; XV, (598), 1582, 1647
 Groves, J. W., XV, 139
 Grozdov, B., XV, 20
 Grubb, N. H., XII, 1271; XIII, 1208; XIV, 1597; XV, 506, 983, 1459, 1496
 Grüberg, V. L., XIII, 173
 Grünberg, I. P., XI, 702; XV, 365, 1343, 1344
 Grünwald, O., XIII, 577
 Gruzdev, G. I., XV, 1518
 Guadagnim, L., XV, (758)
 Guatemala, Dirección General de Agricultura, XI, 356; XII, 1515
 Guba, E. F., XIV, 1632
 Guedon, A., XV, 1381
 Guenther, —, XII, 424
 Guérin, B., XV, 2033
 Guerreros, R. F., XV, 1870
 Guest, E., XI, 216
 Guest, P., XIII, 1547; XIV, 356
 Guest, P. L., XIV, 1830; XV, 779
 Guggenberg, N., XV, 881
 Guillaumin, A., XIII, 70
 Guinet, C., XIII, 70
 Guirfanova, K., XIV, 1307
 Guiscafrr-Arrillaga, J., XII, 245; XIII, 1013; XV, 833
 Gukasjian, A. S., XIV, 541
 Gukova, M. M., XIV, 1285
 Gulf of Guinea, Spanish Territories, *see* Dirección General de Marruecos
 Gulick, A., XI, 1089
 Gull, A. W., XIV, 814
 Gulu, A., XI, 1317
 Gundersen, A., XI, 1291
 Gundersen, H., XI, 800; XIV, 1164, 1637
 Guinness, C. I., XI, (984)
 Günther, F., XIV, 54
 Gunther, F. A., XIII, 554, 1320, 1321; XIV, 1852, 1854; XV, (1658)
 Gunton, H. C., XIV, (1476)
 (Gunton, H. C.), XV, 946
 Gupta, G. N., XIII, 1009
 Gupta, J. C. S., XIV, 1713; XV, 821
 Gur'ev, P. G., XIV, 476
 Gurgell, J. T. A., XI, 494
 Gurvich, B. R., XII, 594
 Gustafson, F. G., XI, (347), 475, 1064; XIII, 13, 202; XIV, 454, (458), 1588; XV, (431)
 Gustafsson, A., XIV, 821
 Gusynin, I. A., XIV, 712
 Guthrie, J. D., XII, 6, 73, 1534; XV, (1336)
 Gutteridge, H. S., XI, (380)
 Guymon, J. F., XIV, (412)
 Györfy, B., XIV, 441
 Gyrisko, G. G., XV, (1071)
 H., XII, 1098
 H., A., XII, 722
 H., A. D., XII, 519
 H., R. C., XI, 368; XII, 310
 Haag, H. B., XIV, (1431)
 de Haan, I., XI, 195, 1377; XII, 1037, 1505
 van Haarlem, J. R., XI, 726; XIV, 1076; XV, 1486
 Haas, A. R. C., XI, 670, 874; XII, 84, 559, 583; XIV, 1322, 1831, 1868; XV, 859, 1225, 1226
 Haas, E., XV, 959
 de Haas, G., XII, 378
 Haas, V. A., XIII, 1065
 Haasis, F. A., XII, 987; XIII, 540
 Haasis, F. W., XIV, 2002
 Haber, E. S., XV, 1902
 Habib, D., XV, 1126
 Hackbarth, J., XI, 474
 Hadar, XI, 842
 Hadfield, J. W., XV, 623
 Hadley, J. M., XIII, 1510
 Hadorn, C., XII, 101, 854, 855; XIV, 116, 549, 581, 1171
 Haenseler, N. J., XV, 727
 Haessler, G. J., XI, 83; XV, 1624
 Haffenreffer, T. C., Jr., XIV, 1999
 Hagan, R. M., XIII, (129)
 Hageman, R. H., XI, 811; XII, 510, 1431; XIII, (227)
 Hagiwara, T., XI, 113
 Hahn, F. L., XV, 1990
 Hahn, G. G., XIII, 822
 Hähne, H., XII, 1442
 Haigh, J. C., XI, 183, 1363
 Haines, G. C., XIII, 1398
 Haines, W. B., XII, 1056
 Halais, P., XV, 825
 Halewijn, E. K. E., XI, 316
 Haley, D. E., XI, (1287); XIII, 1365; XV, 355
 Halferdahl, A. C., XIII, 833
 Hall, D., XI, 10
 Hall, E. G., XII, 667; XIII, 968; XIV, 389, 919, 1947; XV, 1303, 1675, 2000, 2003
 Hall, E. R., XV, 991
 Hall, H. M., XIII, 1379
 Hall, J. W., XIV, 644, 747
 Hall, R. C., XII, (988)
 Hall, W. J., XIV, 1817
 Haller, H. L., XIV, 632, 1183, (1431); XV, 1047, 1058
 Haller, M. H., XI, (737); XII, 1241, 1253; XIII, 124, 1199
 Halliday, O. E., XI, 161
 Hallowell, E. M., XI, 1468
 Hallsworth, E. G., XIV, 1759
 Halma, F. F., XI, 522, (872); XII, 1467, 1493; XIII, 1467; XIV, 1824; XV, 1200
 Halperin, L., XIV, 577
 Hamada, K., XI, 113
 Hambridge, G., XI, 1015
 Hambleton, E. J., XV, 1923, 1924
 Hamburger, J. J., XII, (680)
 Hamence, J. H., XV, 1404
 Hamersma, P. J., XIV, 754, 1328
 Hamid, A., XII, 665
 Hamill, G. K., XII, (708)
 Hamilton, C. C., XI, (1300)
 Hamilton, D. W., XI, 769; XIII, 829; XIV, 1156
 Hamilton, J., XII, 119; XIV, 321
 Hamilton, J. M., XIII, 1272, 1277, 1318; XIV, 72, 154, 1137; XV, (598), 1053
 Hamilton, R. A., XII, 642
 Hamilton, R. G., XIV, 642
 Hamly, D. H., XII, (1195)
 Hamm, P. C., XIII, 904, (1283); XIV, 445
 Hammar, H. E., XIII, 1249; XV, 534
 Hammer, O. H., XI, 769
 Hammer, W., XIII, 851
 Hamner, C. L., XI, 6; XII, 345, 1432; XIII, 208, 363; XIV, 226, 720, 1273, 1464; XV, 581, 1490
 Hamner, K. C., XII, 1432; XIV, 996, 1459
 Hamner, L., XV, 422
 Hamner, M. E., XII, 1433
 Hampson, E. K., XIV, 1764
 Hancock, W. G., XI, 540, 1439; XIV, 97, 517; XV, 304, 1295, 1803
 Hanf, M., XII, 453
 Hanna, G. C., XIII, (231), 1332, (1454); XIV, (1803)
 Hansberry, R., XII, (462); XIII, 1297, 1328; XIV, 1657; XV, 1055, 1180
 Hanschell, D. M., XI, 224
 Hansen, C. J., XIV, 120
 Hansen, E., XII, 1525; XIV, 409, 1943
 Hansen, H. N., XI, 835; XIII, (109); XIV, 1146
 Hansen, H. V., XV, (1852)
 Hansen, J. W., XIII, 1230
 Hansen, L., XV, 600
 Hansens, E. J., XII, 1292
 Hansford, C. G., XIV, (903); XV, 267, 816
 Hansing, E. D., XIII, (101)
 Hanson, A. J., XII, 867, 951
 Harden, F. B., XIV, 1531
 Hardenburg, E. V., XV, 748
 Harder, R., XIV, 438; XV, (432)
 Hardesty, J. O., XV, (1406)
 Harding, P. L., XI, 839, 843; XII, 994; XV, 782
 Hardon, H. J., XII, (273)
 Hardy, C. H., XII, (1347); XV, 1051
 Hardy, E., XV, 166
 Hardy, F., XI, 546, 1390; XII, (603); XIII, (287), (601), (1016), 1109; XV, 289, 824, 1270

AUTHOR INDEX

- Hargrave, J., **XI**, 136, 826, 827, 828; **XV**, 1760, 1798
Hargrave, P. D., **XII**, 792; **XIII**, 728, 927
Harlamov, V. P., **XI**, 724, 725
Harlan, J. D., **XIV**, 692
Härle, A., **XII**, 1402
Harley, C. P., **XII**, (1246); **XIII**, 749; **XIV**, 1571
Harlow, L. C., **XV**, 488
Harman, S. W., **XII**, 875, (1328); **XIII**, 1301; **XIV**, 1626; **XV**, 1622
Harmer, P. M., **XII**, 143
Harmon, F. N., **XII**, 1299; **XIV**, 105, 1559
Harper, R. S., **XIV**, 1489; **XV**, (758), 1005
Harper, S. H., **XIII**, 447, 1319
Harrar, J. G., **XIII**, 1278
Harrington, C. D., **XIV**, 1293; **XV**, (1852)^o
Harrington, F. M., **XII**, 930
Harrington, J. F., **XV**, 404
Harris, D., **XIII**, 1625
Harris, D. G., **XIII**, 1128
Harris, G. H., **XI**, 1252; **XIV**, 1730; **XV**, 508
Harris, M. R., **XV**, 751
Harris, P. L., **XI**, 242
(Harris, R. V.), **XIII**, 813
Harris, R. V., **XII**, 436, 437; **XIII**, 1264; **XIV**, 1546; **XV**, 506, 1496
Harris, W. V., **XI**, 609
Harrison, A. L., **XV**, (758)
Harrison, C. M., **XII**, 814
Harrison, E., **XII**, 1024
Harrison, H. L., **XI**, 1264
Harrison, J. W. H., **XIII**, 236; **XIV**, 822
Harrison, P. K., **XI**, (821)
Hart, F. P., **XI**, 769
Hart, H., **XIV**, (161)
Hart, J. E. M., **XIV**, (547)
Harter, L. L., **XIV**, 798, (799), 1787; **XV**, (227)
Hartley, K. T., **XIII**, 654
Hartley, W., **XIV**, 970
Hartmair, V., **XIV**, (1298)
Hartman, E. L., **XI**, 811; **XII**, 510; **XIII**, 207
Hartman, F. O., **XII**, (1246)
Hartman, H., **XI**, 346
Hartman, J. D., **XIII**, 196, (219), 1445; **XIV**, 262, 377; **XV**, 1788
Hartmann, A., **XV**, 2045
Hartmann, B. G., **XIII**, 1586
Hartmann, H. T., **XI**, (779); **XIV**, (19)
Hartzell, A., **XI**, 767, 1196; **XIII**, 450, (956), 1327; **XIV**, 1181; **XV**, 1062, (1658)^v
Hartzell, F. Z., **XIV**, (1662)
Harvey, C., **XI**, 1360
Harvey, H. L., **XII**, 1002; **XIII**, 942
Harvey, P. H., **XIII**, 1548
Harvey, R. B., **XIV**, 721
Harvey, W. A., **XIV**, 607; **XV**, (1658)^l
Harvill, E. K., **XI**, (1300); **XIV**, 1003
Haskell, G., **XIV**, 167; **XV**, 131
Haskell, R. J., **XIII**, 179
Hasler, A., **XIV**, 1074
Hasper, E., **XIV**, 1026
Hasselbrauk, K., **XIV**, 748
Hasselhuhn, E. T., **XII**, 637
Hastings, R. J., **XIII**, 242
Hatcher, E. S. J., **XI**, (131); **XV**, 1431
Hattingh, C. C., **XIV**, (1184); **XV**, 103, 1045
Hatton, R. G., **XII**, 1272; **XIII**, 488, 710, 895, 1140, (1374); **XIV**, 33; **XV**, 1407
Haubrich, W. P., **XV**, 428
Hauck, H. M., **XV**, (758)
Haughton, J. M., **XV**, (1852)^a
Hauser, E. A., **XI**, (641)
Hausrath, E., **XI**, 473; **XII**, (982)
Haut, I. C., **XI**, (737), (1137), 1459; **XIII**, (81)
Hauville, A., **XIII**, 789
Havis, A. L., **XIII**, 1214
Hawaii Agricultural Experiment Station, **XI**, 1028; **XII**, 266; **XIII**, 1632
Hawker, L. E., **XIII**, 1460; **XIV**, 832, 833; **XV**, 241
Hawkes, J. G., **XIII**, (33)
Hawkins, A., **XI**, 1226
Hawkins, F., **XIV**, 1189
Hawkins, R. S., **XI**, 902
Hawthorn, L. R., **XI**, 445, 803; **XIII**, (219); **XIV**, 639, 1735
Hawthorn, P. L., **XV**, (758)
Hay, R. C., **XII**, 36
Haye, K. A., **XIII**, 1026
Hayhurst, H., **XI**, 647
Hayley, D. E., **XIII**, 1182
Hayne, D. W., **XII**, 129
Hayslip, N. C., **XIV**, 666
Hayward, H. E., **XI**, 1260; **XII**, 998; **XIII**, 24, 1185; **XIV**, 443, 779, 1207
Hayward, K. J., **XI**, 529, 871; **XII**, 127, 219, 873, 874, (1390); **XIV**, 835, 1153, (1184), 1846; **XV**, (128), 799, 1900
Hazen, W. E., **XIV**, 1471
Hazina, E. P., **XI**, 1253
Head, W., **XII**, 1075, (1095); **XIV**, 1336
Heath, O. V. S., **XI**, (1073); **XII**, 954; **XIV**, 237, 737; **XV**, 195, 687, 1691
Heberlein, D. G., **XV**, 1327
Heckman, J. H., **XIII**, (403)
Hector, J. M., **XV**, 252
Hedges, F., **XIV**, 1788
Hedlund, T., **XIII**, (1138)
Hedrick, U. P., **XV**, 916
Heeger, E. F., **XII**, 946; **XIV**, 711; **XV**, 162, (1852)^p
Heiberg, B. C., **XV**, 875
Heid, J. L., **XI**, 1455; **XII**, 300; **XIV**, 941, 1995; **XV**, 908, 1311
Heilborn, O., **XIII**, 389
Heim, R., **XIII**, 229
Heimpel, L. G., **XV**, 592
Heinhold, J., **XII**, (982)
Heinicke, A. J., **XII**, 1266; **XIII**, 677
Heinrichs, P., **XIV**, (1083)
Heinze, K., **XII**, 477; **XIV**, 1288
Heinze, P. H., **XI**, 1070; **XII**, (1454); **XIV**, 915, 1965; **XV**, 1174
Heley, K., **XII**, 515
Hel'fandbein, P. S., **XIV**, 82
van Hell, W. F., **XI**, 940
Heller, V. G., **XI**, 811
Hellmers, P. C., **XV**, 688
Helson, G. A. H., **XIII**, 469; **XIV**, 158, 1205
Hely, P. C., **XI**, 527; **XIV**, 1840; **XV**, 1895
Hemmi, T., **XI**, (131)
Hemphill, D. D., **XIV**, 1785; **XV**, 722
Henderson, C. F., **XIII**, 557, 561; **XIV**, 1325
Henderson, J. H. M., **XV**, 720
Henderson, M. T., **XIII**, (474), 870
Henderson, R. G., **XII**, 191; **XV**, 732, 1821, (1852)^y
Henderson, V. E., **XIII**, (1358)
Hendrick, A. B., **XV**, (1658)^p
Hendricks, R. H., **XIV**, 1470
Hendrickson, A. H., **XII**, 33, 66, 825, 1254; **XIII**, (375); **XIV**, 1976
(Hendrickx, F. L.), **XV**, 840
Henning, L. J., **XIV**, 1188
Henning, P. D., **XIII**, 918
Hendricksen, H. C., **XI**, 959
Henry, A. J., **XV**, 359
Henry, B., **XII**, 174
Henry, B. W., **XIV**, 1131
Hepburn, G. A., **XIV**, 631, 853
Hepler, J. R., **XIII**, 172
Herbst, W., **XI**, 393, 428; **XII**, 423, 444; **XV**, 1665
Herchenroder, M. V. M., **XIII**, (1138)
Hering, E. M., **XIV**, (1298)
Heriot, A. D., **XII**, 1323; **XIII**, 113
Herman, F. A., **XII**, 397, 460
Hernandez Medina, E., **XV**, 293
Herold, G., **XIII**, 79, 1212
Herrero (Egana), M., **XI**, 512, 844; **XII**, 991, 1008; **XV**, 1205
Herriot, R. I., **XV**, (432)
Herrman, R., **XIV**, (1030)
Hertzman, N., **XII**, 1563
Hervey, G. E. R., **XIII**, 514
Herviaux, J., **XV**, 1844, (1852)^g
Hess, A. D., **XI**, 768
Hesse, C. O., **XII**, 1265, 1268
Hessler, L. E., **XV**, (758)
Hester, J. B., **XII**, (513); **XV**, 1168
Heubel, G. A., **XI**, 218, 582
Heuberger, J. W., **XII**, 890, 975; **XIII**, 120, 1317; **XIV**, 616, 617; **XV**, (596), (598)
Heupke, W., **XIII**, 848
Heuser, W., **XIV**, 216

AUTHOR INDEX

- Heussi, G., XV, 1590
Hewer, D. G., XII, 316
Hewetson, F. N., XI, 713; XII, 64, 1229; XV, 468
Hewitt, E. J., XIV, 1672; XV, 220, 1676, 1684
Hewitt, W. B., XI, 362; XII, 448; XIII, 815
Hewston, E. M., XII, (708)
Hey, G. L., XIV, 1148, 1653; XV, 122
Heyl, W., XIV, (458)
Heynard, F., XV, 1398
Hibbard, A. D., XIV, 1069, 1087, 1520; XV, 496
Hibbard, P. L., XIV, (458)
Hibbard, R. P., XV, 7
Hibberd, P. H., XI, 24
Hickinbotham, A. R., XI, 629
Hickman, C. J., XI, 799, (821); XIII, 1316; XIV, 240, 1738
Hicks, E. W., XV, (321)
Hicks, F., XIV, 825, 826
Hieke, K., XV, 154
Hienton, T. E., XV, (2011)b
Higbee, E. C., XIV, 1342, 1883; XV, 1597
Higby, R. H., XII, 298
Higgins, A. E. H., XII, 1538
Higgins, B. B., XI, (1145); XII, 232; XIV, 69
Higgins, E. R., XI, (301)
Higgins, V., XV, 5
Hilborn, M. T., XI, 710; XII, 1110; XIII, 383
Hildebrand, A. A., XI, 1160, 1166, 1167; XIII, 1363
Hildebrand, E. M., XI, 754, 757, (779); XII, 848, 852, 1304, (1318), (1440); XIII, 97, (101), 806; XIV, (547), 1123, 1592, 1609; XV, (505), 550, 554, (598)
Hildebrand, E. N., XIV, (1184)
Hildebrandt, A. C., XV, (598)
Hildebrandt, B., XI, 400, 419; XII, 1295; XIV, (528)
Hilditch, T. P., XIII, (1454)
Hildreth, A. C., XI, 1134
Hilgeman, R. H., XI, 855; XII, 208
Hilkenbäumer, F., XII, 377, 1233; XIV, 496; XV, 1446, 1452
Hill, A. G., XII, 1349
Hill, A. V., XI, 482; XII, 726, 940; XIII, 1433
Hill, A. W., XI, 1351
Hill, D. D., XV, 159
Hill, G. R., XIV, 1470
Hill, H., XI, 720, 752; XIV, 177; XV, 85
Hill, R., XII, (367); XIV, (458)
Hillary, B. B., XII, (1195); XIII, (31)
Hillier, E. L., XIV, 830; XV, 228
Hills, C. H., XIII, (231)
Hillsborough Research Institute, XI, (1526); XII, (1584); XIV, 958; XV, (391)
Hilton, R. J., XI, 987, 1466; XII, 380, 381; XIV, 1504; XV, 64, 69, 70, 1019
Hilyer, C. I., XI, 322
Hinckley, F., XI, 148
Hines, L., XII, 1490
Hinrichs, H., XIV, 90, (1662)
Hipolito, O., XI, 915
Hirata, K., XI, 1168
Hirst, C. T., XIV, 1695
Hirst, F., XV, (1336)
Hitchcock, A. E., XI, 1065; XII, 7, 1182, 1223; XIII, 365, 366; XIV, 85, 1003; XV, 423, 424, (431), 721, 1401
Hitsov, M. D., XII, 965
Hitz, C. W., XI, 1459
Hixson, E., XI, 1195
Hlebnikova, N. A., XIII, 168, 169
Hoagland, D. R., XI, (689); XIII, 1117, 1419; XIV, 1011, 2005
Hoare, A. H., XI, 106; XII, 902; XIII, 170
Hobbs, E. W., XI, 781; XII, 905; XIV, 1480; XV, 1443, 1451
Hobbs, C. H., XV, 669
Hobbs, C. L., XV, (599)
Hoblyn, T. N., XI, 50; XII, 381, 1272; XIII, 711, 1141, 1202, 1268; XIV, 1482; XV, 1418, 1686
Hockey, J. E., XV, 97
Hockey, J. F., XI, 425; XIII, 1261; XIV, 532; XV, (1071), 1094
Hockey, K. C., XV, 1068
Hodge, E. J., XII, 1431
Hodge, W. H., XII, 592, (595)
Hodges, F. A., XII, 1545
Hodgkiss, W. S., XI, (1092); XIII, (227)
Hodgson, R., XV, (1071)
Hodgson, R. W., XI, 734, 854, 875; XII, 206, 211; XIII, 987, 992; XIV, 84, 306, 1823; XV, 249, 787, 1193, 1218, 1223
(Hodgson, R. W.), XIV, 1335
Hodson, A. Z., XI, 283
Hoecker, R. W., XIII, 1406
Hoerner, G. R., XIII, (164)
Hofer, A. W., XIII, 1450
Hoffman, G. P., XIV, 1857; XV, (758)
Hoffman, H., XV, 1510
Hoffman, M. B., XI, (737), 972; XII, 79, 805, 1262, 1266; XIII, 1198; XIV, 1080, 1537, (1545)
Hoffmann, G. P., XII, 569
Hoffmann, O., XIV, 643
Hoffmann, W., XIV, 678
Höfler, K., XII, 464; XV, 87
Hofmeyr, J. D., XII, 1438
Hofmeyr, J. D. J., XII, 233; XIV, 1188
Höhener, A., XIV, (1662)
Hohenstatter, E., XIII, 694
Hohl, L. A., XIII, 1065; XIV, 1427; XV, 343, 885
Holbeche, J. A., XI, 1151
Holdaway, F. G., XII, 266
Holdsworth, M., XIV, 237; XV, 687, 1148
Holland, C. A., XV, 1841, 1842
Hollands, H. F., XIII, 161
Hollar, V. E., XV, 1902
Holley, W. D., XIII, 232
Hollinger, M. E., XIV, 1966
Holloway, F. E., XV, 866
Holloway, J. K., XIII, 557, 561
Holman, H. J., XV, 1926
Holmberg, C., XI, 745
(Holmes, A. D.), XIII, 963
Holmes, E., XI, 656
Holmes, F. O., XIII, (487)
Holodnyi, N. G., XV, 240
van Holten, P., XV, 901, 1326, 2037
Holtorp, H. E., XIV, 16
Holubinsky, *see* Golubinski
Holz, W., XI, 427
Homedes Ranquini, J., XV, 1738
Home-Grown Threshed Peas Joint Committee, XV, 1181
Honeywell, E. R., XV, 1856, 1859, (1865)c
Hong Kong Botanical and Forestry Department, XII, (723)
Honig, P., XV, 812
Hontz, L. H., XV, 1332
Hood, S. L., XIV, 1770
Hoogerheide, J. C., XV, (1071)
Hooker, W. J., XIV, (635), 1732; XV, 1101, 1774
Hoon, R. C., XV, (34), 273
Hooper, C. H., XV, 41, (74)
Hooper, P. D., XI, 65
Hoos, S., XII, 1216
Hoover, A. A., XIII, 587
Hope, C., XII, 534; XV, 464
Hopkins, D. P., XI, 989, 993; XII, 1116, 1117, 1118
Hopkins, E. F., XV, (431), 1919
Hopkins, J. C. F., XI, 114, (1300); XII, 155, 261; XIII, 171, 188, 484, 1410, 1499; XIV, 224, (715), 1258, 1923; XV, 726
Hopkins, J. M., XII, 818
Hopkins, J. W., XI, 335
Hopkins, R. H., XIV, 940; XV, (2059)k
Hopp, H., XIV, (1030)
Hopperstead, S. L., XIII, 766, (845); XIV, 1180; XV, 1638
Horn, C. L., XI, 589; XIV, 354
van Horn, C. W., XII, 90; XIII, 1232
Horn, N. L., XV, 699
Horne, W. T., XI, 542; XII, 585; XIV, 127
Horner, C. K., XIII, (23)
Horner, G., XI, 1476, 1477; XII, 1542; XIII, 325
Hornsey, W. H., XV, 616
Horowitz, B., XIII, 856
Horsfall, J. G., XII, 975; XIII, 120, 802, 1312, 1317; XIV, 616, 672, (1184); XV, (598), (599), 1646
Horsfall, J. A., XIV, (1662)
Horth, C. J., XII, 1258

AUTHOR INDEX

- Horticultural Division and Chem-
ists Branch, Victoria, Aust.,
XII, 1000
- Horticultural Education Associa-
tion, XIII, (758), (763); XIV,
(19), 1439
- Horticultural Society of India,
XIV, 959
- Horton, D. E., XI, 831, 832, 833,
(836)
- Horton, H. A., XII, (982)
- Hosaka, E. Y., XIV, (365)
- Hoskins, W. M., XII, (1347)
- Hosny, M., XII, (235)
- Hough, L. F., XII, (1318); XIV,
(1476), 1508, 1602
- Hough, W. S., XV, (1658)m
- Houseman, E. E., XIV, (19)
- Howard, A., XIII, 61, 158, 181;
XIV, (19), 465, 1613
- Howard, A. L., XIII, 786; XIV,
1311; XV, 230
- Howard, F. L., XII, 459, 514;
XIII, 194; XIV, (547); XV,
584, (598)
- Howard, H. W., XIII, (33)
- Howard, L., XI, 769
- Howard, L. B., XIII, (562);
XIV, 856
- Howard, N. F., XIII, 1349; XIV,
620, (1662); XV, 1097
- Howard, P. A., XIII, 339
- Howard, W. L., XI, 35
- Howe, G. H., XIV, (1545)
- Howes, F. N., XI, 180; XIII, 174,
1378
- Howitt, J. E., XV, 1008, 1011
- Howland, A. F., XIV, 267, (665)
- Howlett, F. S., XI, 1507; XII, 70,
172; XIII, 1195, 1425; XIV,
87
- Hoy, B., XIV, 1079
- Hoyman, W. G., XV, 183, 221
- Hoynak, S., XII, (708)
- Hoyt, R. C., XIV, (746)
- Hrimlian, A. L., XII, 1399
- Hsieh, K. M., XV, (1853)h
- Hubbeling, N., XIV, 1283
- Hubbell, W. W., XI, 863
- Hübbsen, E. R., XIV, (1370)
- Hubble, G. D., XI, 65
- Huber, B., XIV, (458)
- Huber, G. A., XI, 1172; XII, 440
- Huber, H., XIII, 1218; XIV,
(2003); XV, 80, (2059)z
- Huberty, M. R., XII, 210; XIV,
(1461); XV, 1221
- Hu Chang-chih, XIV, 1317
- Huckett, H. C., XIII, 531
- Huelin, F. E., XI, 256, 259, 611,
613; XIII, 305, 1258; XIV,
1383
- Hughes, C. W., XI, 1120
- Hughes, H. M., XIV, 1477, 1758;
XV, 1799
- Huitema, W. K., XI, 1352; XII,
(659)
- Huizer, A., XII, (641)
- Hukill, W. V., XIII, 1033
- Hull, H. H., XV, 520
- Hülphers, A., XIV, 498, 1039;
XV, 446
- Hulsmann, B., XII, 1230; XIV,
1053, 1058
- Hum, T. Y., XIV, 1717
- Hume, E. P., XI, 1292
- Hummel, M. E., XII, (1142)
- Hummer, R. W., XV, (1298)
- Humphrey, N., XII, 1081
- Humphries, E. C., XI, 1387;
XIII, 599; XIV, 398, 1348,
1897, 1904, 1905; XV, 292,
(361), 1255
- Hunkel, R., XV, 684
- Hunt, L. W., XV, 2015
- Hunter, A. S., XIII, (1182); XV,
669
- Hunter, B., XIII, 223
- Hunter, G., XIV, 1394; XV, 890,
891
- Hunter, J. G., XIII, 16, 209
- Hunter, J. H., XII, 416; XV, 523
- Hunter, R. F., XI, (641); XIV,
(412)
- Huntley, G., XII, 1054
- Huntley, J. G., XI, 634
- Hurd, E. B., XIII, 35, 161
- Huriez, H., XV, (1852)g
- Hurst, C. C., XI, 507, 1293
- Hurst, H., XIII, 1311; XV, 1540
- Hurt, E. F., XIV, 213
- Hurt, R. H., XV, (1658)m
- Hurwitz, S., XI, 1349
- Husain, M. A., XI, 430
- Husfield, B., XIII, 795; XIV,
(1102)
- Hussein, A. A., XII, 1128
- Hustrulid, A., XIII, 1602
- Hutchings, C. D., XI, 909, 1444
- Hutchins, A. E., XIV, 174; XV,
710
- Hutchins, L. M., XII, 851
- Hutchinson, J., XIV, 1305
- Hutchinson, R. C., XII, 690
- Hutton, R., XII, 43; XIII, (845);
XV, 1631, 1635
- Hutton, E. M., XIII, 468, 1417;
XIV, 287, 1268; XV, 223, 225
- Hutzel, J. M., XIV, (1662)
- Hwang, T.-C., XV, (34)
- Hyam, G. N., XII, 485, 516;
XIII, (225)
- Hyland, F., XI, (1137)
- Hylmö, B., XIII, 452; XV, 129
- Hynam, C. A. S., XI, 1354
- Hynes, H. J., XI, 1446
- Hyre, R. A., XIII, (123)
- Ibarra, H. T., XV, 1323
- Idaho Agricultural Experiment
Station, XV, 1350, (1366)
- Ikata, S., XI, 1169
- Ikedo, M., XIII, 52
- Ilagan, J. M., XI, 1443
- Iliew, J., XV, (1535)c
- Il'inskij, A. A., XIII, 722
- Ilijn, C., XIV, (691)
- Ilijn, M. M., XIV, 975, 1236
- Ilijn, W. S., XIV, 558, 559
- Illinois State Horticultural Socie-
ty, XV, 934
- (Ilyin, G.), XIII, 482
- Imle, E. P., XI, (1300); XIII, 525;
XV, 1966
- (Imle, E. P.), XIV, 1359
- Imms, A. D., XIV, 1161
- Imperial Agricultural Bureaux,
XIII, 1099; XIV, 2029
- Imperial Agricultural Research
Institute, India, XI, 1515;
XIII, (672)
- Imperial Bureau of Horticulture
and Plantation Crops, XI,
330, 1510; XV, 2080, 2081
- Imperial College of Tropical
Agriculture, Trinidad, XII,
335, 1161; XIII, 688; XIV,
1449; XV, 1364, 2082f
- Imperial Council of Agricultural
Research, India, XII, 1152,
1577; XIII, 1094; XV, 379,
380
- Imperial Institute, XI, 85; XIII,
348
- (Imperial Institute), XIV, 1245
- Imperial Mycological Institute,
XIV, (1184)
- Imperial Parasite Service, XIV,
(1185)
- India, Horticultural Society of,
XIV, 959
- India, Imperial Agricultural
Research Institute, XI, 1515;
XIII, 672
- India, Imperial Council of Agri-
cultural Research, XII, 1152,
1577; XIII, (1094); XV, 379,
380
- India, United Provinces, Depart-
ment of Agriculture, XI, 1524
- Indian Tea Association, XI, 1029;
XIII, 273, 343; XIV, 419;
XV, 1351
- I.N.E.A.C., *see* Institut
- Ing, E. G., XII, (982)
- Ingram, C., XIII, 42, 1159; XIV,
1309, 1310; XV, 51, 52, 229,
460
- Ingram, J. M., XIV, 262
- Innes, R. F., XI, (248), 1361;
XII, (273)
- Institute of Brewing, XI, (1054);
XII, (723); XIII, (672); XIV,
966
- Institut francais du Caoutchouc,
XV, 2066
- Institut national pour l'étude
agronomique du Congo belge
[I.N.E.A.C.], XIV, 1914, 2017
- Institute of Grain Husbandry,
Moscow, XIV, 1024
- (Institute of Grain Husbandry,
South-Eastern U.S.S.R.), XV,
1368
- Institute for Research in Agricul-
tural Engineering, XI, 1085
- Institute of Tropical Agriculture,
Mayagüez, XV, 1235
- Intengan, C. L., XI, (1506)
- International Institute of Agricul-
ture, XIII, 1628
- Iowa Agricultural Experiment
Station, XI, 1030; XIV, 420,
1440; XV, 1352

AUTHOR INDEX

- Ipatjev, A. N., XIV, 1501; XV, 11
- Ippisch, F., XV, 1920, 1948
- Ippisch, F., Jr., XI, 1488; XII, 1029, 1046; XIV, 1907
- Irrigation Research Extension Committee, N.S.W., XIV, 307
- Irving, G. W., Jr., XIV, 2000
- Isaac, W. E., XI, 253, 262, 263; XII, 1521; XIV, 1404; XV, 871
- Isaacs, T. L., XII, 777
- Isasca, A. J. V., XII, 621
- Isbell, C. L., XI, 1129; XIV, 1742; XV, 803
- Isely, D., XIV, 602; XV, (1658)o
- Ishaq, M., XIII, 1606
- Isimaru, T., XII, 47; XIII, 46
- Islip, H. T., XV, 2050
- Issacovitch, C., XI, (887)
- Ito, K., XIII, (298)
- Ivanitzkaja, E. F., XV, 1140, 1749
- Ivanoff, S. M., XI, 896
- Ivanoff, S. S., XI, 1164, 1165; XIV, 1676, 1753; XV, 1761
- Ivanov, M. A., XIV, 27
- Ivanov, S. L., XV, 393
- Ivanov, S. M., XII, 1463
- Ivanov, V. V., XV, 409, 1851
- Ivanova, V. I., XI, 896
- Ivanowski, D., XII, 1394
- Iverson, V. E., XII, 930
- Iyer, S. S., XI, (248)
- J., J. H., XV, 1249
- Jaarsveld, A., XV, 612
- Jack, H. W., XI, 312, 1353; XII, (723)
- Jack, R. W., XII, 193
- Jacks, H., XV, 614, 1696, 1699
- Jackson, A. D., XII, (337), (1584)
- Jackson, G. A. D., XIV, 822
- Jacob, A., XI, 520; XII, 475; XIII, 1
- Jacob, F. H., XI, 763
- Jacob, H. E., XII, 448, 1127; XIII, 1220; XIV, 1414
- Jacob, K. D., XI, 372; XIV, 185; XV, 206
- Jacob, W. C., XII, 470, 496
- Jacobs, S. E., XI, 464
- Jacobson, L., XI, 344
- Jacobson, M., XIV, 1183, (1431)
- Jacoby, F. C., XIV, 1960; XV, 2025
- Jagger, I. C., XIII, 191
- Jagodvina, V. P., XII, 1178
- Jahn, A., XI, 38
- Jahn, E., XIII, 817; XIV, (1184)
- Jahns, F. W., XV, (2060)c
- Jain, N. L., XV, 903
- Jakimov, P. A., XIV, 1297; XV, 171
- Jakovlev, L. I., XIV, 40, 493
- Jakovlev, P. N., XI, 1104; XIV, 29
- Jakovuk, A. S., XV, 638
- Jamaica Department of Science and Agriculture, XI, 911, 1031; XII, 1153; XIV, 2022; XV, 1353
- James, D. P., XIV, 1985; XV, 2017
- James, W. O., XI, 1280; XIII, 679
- Jameson, D. H., XV, 367
- Jamias, J., XI, 1422
- Janaki Ammal, E. K., XV, 2065
- Jancke, XIV, 1617
- Jancke, O., XIV, 142, (635)
- Janer, J. R., XIII, 310
- James, B. E., XII, 175; XIII, 167; XV, (758)
- James, R. J., XV, (1071)
- Janisch, E., XIV, 1118
- Janisevskii, D. E., XV, 6
- Janjua, N. A., XII, 876; XIII, 1298
- Jansen, J. A., XIV, 766, 1261
- (Jaramillo, J. H.), XIII, 596
- Jaramillo, J. H., XIII, 1516
- Jaretzky, R., XV, (1852)f
- Jarkovaja, L. M., XII, (765); XIV, (1030)
- Jarošenko, G. D., XV, 150
- Jarovenko, B. F., XV, 191
- Jarvesoo, E., XI, 455
- Jarvis, H., XIV, 1930
- Jary, S. G., XII, 915
- Jasper, H., XII, 528
- Jastrebn, M. G., XI, 1254
- Java, Proefstation Midden-en Oost-Java and Besoekisch Proefstation, XII, (641)
- Java, Proefstations der Centrale Proefstations Vereeniging, XII, 1512
- Javaraya, H. C., XIV, 520
- Jayaraman, V., XIV, 1344
- Jayaratinam, T. J., XI, 953; XII, (653)
- Jayasundera, E. S., XIV, 875
- Jayaweera, D. M. A., XIV, (903)
- Jaynes, H. A., XI, 914
- Jazvicky, M. N., XIII, 412
- Jeffers, W. F., XIII, 796; XIV, 1133, 1141; XV, (596), 1904, 1905
- Jefferson, R. N., XIII, 1571
- Jeffrey, R. N., XII, (532); XIV, (945), 1971; XV, (758)
- Jenkins, A. E., XV, (596), 1579, 1838
- Jenkins, C. F. H., XIV, 592, 1280; XV, 1612, 1896
- Jenkins, E. W., XIV, 57
- Jenkins, G. N., XIII, 642
- Jenkins, J. M., XII, 503; XIII, 198, (1445)
- Jenkins, W. A., XII, 861
- Jennerup, E., XV, (1302)
- Jennings, C., XIV, 1651
- Jenny, J., XI, 988; XII, 678, 768; XIII, 842, 1308; XIV, 366, 382, 386, 1411, (1662); XV, 316, 348
- (Jensen, C.), XII, 16
- Jensen, C., XIV, 437
- Jensen, H., XIV, 509
- Jensen, H. L., XV, 9
- Jensen, J. H., XV, (227), 1837
- Jewell, W. R., XIII, 1055
- Jewett, H. H., XII, (532); XV, (758)
- Jirak, L., XIV, 118
- Joachim, A. W. R., XI, (965); XII, 280; XIII, (589); XIV, 401; XV, 2057
- Joffe, J. S., XIV, 1679
- Johansen, D. A., XI, 19, 1014
- Johansen, G., XIV, 446
- Johansson, E., XII, 1285; XIII, 319, 392, 1143, 1304; XIV, 459, 486, 1121, 1170; XV, 450, 481, (526)
- John, C. M., XII, 307
- John, J. L., XIV, (673)
- John, P. K., XII, 1556; XIII, 1536
- John Innes Horticultural Institution, XI, 45, 654, 1032; XII, 505, 712; XIII, 665; XIV, 774, 960; XV, 16, 17, 18, 40, 462, 935, 1345
- Johns, H. K., XIV, 556
- Johns, R., XI, 141
- Johnson, A. C., XIII, (451)
- Johnson, C. M., XIII, 204, 205; XV, 1324
- Johnson, D. L., XI, 436
- Johnson, E. M., XII, (532); XIII, (231), (893); XIV, 1219, 1220
- Johnson, F., XI, 1213
- Johnson, F. H., XII, (1095)
- Johnson, G. C., XI, (488)
- Johnson, J., XII, 531, (532), 847, 1303; XIII, (231); XV, (598)
- Johnson, L. P. V., XV, 2020
- Johnson, W. A., XIV, 1772, (1803)
- Johnson, W. J. B., XI, 304
- Johnston, A. N., XIII, 211
- Johnston, B., XI, 187
- Johnston, F. A., Jr., XV, 806
- Johnston, F. B., XIII, (1087), 1558
- Johnston, J. C., XIII, 549; XIV, 1320, 1322
- Johnston, J. P., XIII, 1459
- Johnston, S., XI, 37, 730; XII, 43; XIII, 78, 778; XIV, 1547, 1549; XV, 1565
- Johnstone, K. H., XI, 102; XII, 901; XIV, 236
- Jojo, W., XI, 551
- Joley, L. E., XI, 1130; XII, 1221; XIV, 1488, (1662)
- Jolivet, J. P., XI, 1243; XIII, 505, 506; XIV, 269
- Jolly, A. L., XIII, 278, 279, 280, 597, 1015; XIV, (1932); XV, 288
- Joly, M., XIV, 1255
- Jonard, P., XV, 1725
- Jones, A. H., XI, (291)
- Jones, D. P., XIII, 1080
- Jones, E. E., XV, (1336)
- Jones, E. W., XIII, 114
- Jones, F. G. W., XV, (758)
- Jones, H. A., XI, 470; XII, 1327; XIII, 130, (231), 1416; XIV, 1733, (1803); XV, 690, (1658)p
- Jones, H. E., XIV, 448
- Jones, I. D., XIV, 376
- Jones, J. M., XIII, 334

AUTHOR INDEX

- Jones, J. O., XII, 913, (929); XIII, 803, 873; XIV, 1771; XV, 1383, 1481, 1553, 1815
- Jones, L. E., XIV, (115)
- Jones, L. H., XI, (1137); XIV, 1253
- Jones, L. K., XI, 825; XIII, 116; XV, 764, 767
- Jones, L. T., XII, 385, (406); XIV, 542, 1197
- Jones, M. A., XV, (1658)q
- Jones, O., XI, 1013
- Jones, R. F., XV, 23
- Jones, R. J., XII, 1188
- Jones, S., XI, 1396
- Jones, S. C., XI, 429; XV, 1611
- Jones, S. E., XIII, 1446
- Jones, T. W., XI, 1013
- Jones, W., XIV, 757; XV, (1336)
- Jones, W. W., XI, 796, 980; XII, 266, 1528; XIII, 612; XIV, 1319; XV, 783
- de Jongh, W. H., XI, 217; XII, (259)
- Jong, P., XII, (659)
- Joosten, J. H. L., XII, (1095)
- Jordan, XIV, 513
- Jornlin, D. F., XII, 749, (1195)
- Joshi, B. M., XI, 610, 616, 983; XII, 284, (674); XIII, 308
- Joshi, K. G., XIII, 1136
- Joslyn, M. A., XI, 299, 636, 998; XII, (680)
- Joubert, C. J., XIV, 593
- Jouis, E., XV, 1470, 1471
- Joy, A. B., XIV, (1476)
- Joyce, F. de V., XIV, 866
- Judkins, W. P., XIV, 1516; XV, (432), 1812
- Juel, I., XIV, 795
- Jukes, E. M. T., XI, 1490
- Julen, G., XIII, 641
- Juliano, J. B., XI, (248); XII, 13, (273)
- Julien, J. H., XV, 1976
- Jump, J. A., XV, (1336)
- Junggreen, Have F., XV, 600
- Jurkevič, I. D., XV, 678
- Justice, O. L., XIII, 1399
- K., M., XI, 1309
- Kaceiko, A. N., XIV, 489, 529
- Kaczmarek, A., XIII, 782
- Kaden, O. F., XI, 565; XII, 649
- Kadow, K. J., XI, 462; XIII, 766, (845)
- Kaempfert, W., XIV, 464
- Kaess, G., XIV, 908
- Kahara, K., XI, 113
- Kaiser, S., XI, (347)
- Kalačnikov, K. Ja., XV, 1818
- Kalaptschieff, G. D., XIII, (886)
- Kalašnikov, V. M., XIII, 1151; XIV, 111
- Kalbfeisch, W., XIII, 138
- Kalichava, A. D., XI, 1316
- Kalin, E. W., XIV, (1803); XV, (432)
- Kalinkevič, A. F., XIII, 1381
- Kalmus, H., XIV, 1175; XV, 219
- Kalmykov, S., XIV, 481
- Kalmykov, S. S., XIV, 482, 544
- Kalra, A. N., XV, 578
- Kamensky, M. M., XIII, 411
- Kämpfer, M., XIV, 1668
- Kanapaux, M. S., XIII, 1048, 1418; XV, 694
- Kandiah, S., XI, (965)
- Kangas, L. R., XII, (982)
- Kaniktar, N. V., XII, (603)
- Kannangara, A. W., XI, 1398
- Kapadia, G. A., XIV, (1298); XV, 761
- Kappen, H., XV, 411
- Kappen, J., XIV, 7
- Kapulur, B., XIV, 1367
- Kapusasing Experimental Station, XIII, 663
- Kar, B. K., XI, 1417
- Kar, P. C., XIV, (365)
- Karabihin, N., XV, 1015
- Karikka, K. J., XV, (758)
- Karmarkar, D. V., XI, 610, 615, 616, 983; XII, 284, (674); XIII, 308
- Karpov, K., XIII, 378
- Karr, C., XIV, 566
- Karr, E. H., XII, (462); XIII, 440
- Kasahara, Y., XI, 1078
- Kassanis, B., XI, (821), 1284; XII, (194), 478; XIV, 1262, 1703; XV, 219, (1185)
- Kassau, H., XII, 428; XIII, 737
- Kastelic, J., XV, 891
- Katz, S. H., XIII, 634
- Katznelson, H., XIII, (1445)
- Kaufmann, H. P., XII, 1401
- Kaufmann, O., XV, 652
- Kavanagh, V., XIII, 17; XIV, (793)
- Kawakami, S., XII, 47; XIII, 46 (Kawereau, E.), XIV, 920
- Kearns, H. G. H., XI, 775, (779), 789; XII, 766, 887, 978; XIII, 863, 916; XV, 1619
- Keck, C. B., XIII, 1497
- Kedrin, S. P., XIII, 1035
- Kedrov-Zihman, O. E., XV, 608
- Kedrova-Zihman, O. K., XV, 608
- Keefer, R. M., XII, (1195)
- Keen, B., XII, 709
- Keen, B. A., XII, (736), 1202
- Keesse, H., XII, 1362
- Kefford, J. F., XV, (1185), 1230
- Kehl, H., XIV, (819)
- Keifer, H. H., XIV, 792
- Keil, H. L., XV, 584, (598)
- Keilin, D., XV, 398
- Keith, J., XI, 982
- Keith, R. W., XV, 1956
- Keithan, E., XII, (1095)
- Keitt, G. W., XI, 758, 1164, 1165; XII, (462), 856, 862; XIII, 819, 1262; XIV, (161), (547), 572, (635), 1136; XV, (598)
- Kelbert, D. G. A., XI, (1266)
- Keller, M. C., XII, 1401
- Kellerhals, E., XV, 522
- Kellerhals, O., XV, 1410
- Kelley, A. P., XI, 378
- Kelley, E., XI, 121
- Kelley, E. G., XIII, (375); XV, 1315
- Kelley, J. L., XII, 830
- Kelley, O. J., XV, 669
- Kelley, V. W., XI, 1157; XII, 1292
- Kelli, A. C., XIII, 1155
- Kelly, C. B., XIV, 1090
- Kelly, C. B., XV, 1455
- Kelly, E., XI, 1498; XV, 886
- Kelly, J. T., XV, (1914)e
- Kelly, W. C., XIV, 1958
- Kelsail, A., XII, 434, 696; XV, 89, 1019
- Kemmer, E., XI, 381, 382; XII, 384; XIV, 32, 53, (528), 1055, 1056, (1567), 1584; XV, (1493)b
- Kemp, H. K., XII, 76, 80; XIV, 1576; XV, 1576
- Kempton, J. H., XIII, (697)
- Kendrick, J. B., XV, (598)
- Kendrick, S. G., XV, 2018
- KenKnight, G. K., XV, 2007
- Kenard, G. B., XIV, 1855
- Kennedy, L. L., XIV, 1394
- Kent, N. L., XI, 1075
- Kent War Agricultural Executive Committee, XIV, 613
- (Kent War Agricultural Executive Committee), XV, 438, 603
- Kenworthy, A. L., XII, 787; XIV, 62, 1510, 1863; XV, 872
- Kenya Coffee Board, XII, 327; XIV, 881, 1892, 2023
- (Kenya Department of Agriculture), XV, 130
- Kepler, R. A., XI, 151, 519
- Kerber, J. P., XIV, (1803)
- Kerkis, J. J., XIII, (219)
- Kerns, K. R., XII, 1183; XIII, 1552
- (Kerr, E. A.), XV, 1420
- Kerr, J. A., XIV, 271, 318; XV, 306, 1830
- Kerr, T. W., XI, 81, 1186; XII, 872
- Kersten, H., XII, (982); XIII, (367)
- Kertesz, Z. I., XII, (708); XIV, 1992; XV, 521
- Kessler, H., XI, (648), 966; XII, 1531; XIV, 937; XV, 38, 1414, 1429, 1996, 1997, 2001, 2004, 2014, 2034
- Kessler, K., XII, 431
- Kessler, W., XI, 404; XIV, 1117
- Kevorkian, A. G., XV, 1946
- Keyes, M. G., XIII, 21
- Keys, O. H., XIV, 406
- Keyworth, W. G., XI, 817; XII, 1396, 1397; XIII, 163, 894, 896, (1374); XIV, 1608; XV, 1123, 1720, (1852)s
- Khan, A. A., XI, 142, 225, 227; XII, 554, 993; XIII, 1028, 1546
- Khan, A. H., XI, 1458
- Khan, A. R., XII, (609)
- Khan, A. W., XI, 1180
- Khan, K. M. A., XII, 682; XIV, 351
- Khan, M. A., XI, 1338; XIV, 300, 1599

AUTHOR INDEX

- Khan, M. A. W., XI, 430; XII, 450
 Khan, R. Z., XIV, 351
 Kharlamoff, *see* Harlamov
 Khazina, *see* Hazina
 Kheswalla, K. F., XIV, 1138
 Khimič, R. E., XIV, 245
 Khlebnikova, N. A., *see* Hleb-nikova
 Khrimlian, *see* Hrimlian
 Kidd, F., XII, 666; XIV, 929
 Kido, G. S., XII, (1328)
 Kidson, E. B., XI, 71; XIV, 562, 1041, 1271; XV, 86, 742
 Kienholz, J. R., XIII, 420; XIV, 570, 578
 Kies, M. W., XIV, (412)
 Kieser, M. E., XI, 990; XIII, 1078, 1079; XV, 327, 1813, 2024
 Kiesselbach, T. A., XIII, 674; XV, 222
 Kilby, W. W., XII, (229); XIII, 1490
 Kilgore, L. B., XII, (1347)
 Kiljian, J. O., XII, 807
 Kilpatrick, D. T., XI, 57, 1150; XIII, (67)
 Kimbrough, W. A., XII, 552; XIV, (1875)
 Kimura, K., XI, 1168
 Kincaid, J. L. B., XI, 229
 Kincaid, R. R., XI, 1286; XIV, 1216
 King, A. S., XIV, 840
 King, C. G., XI, 284, 290
 King, F. C., XIV, 1199; XV, 917
 King, H. L., XIII, 1286; XV, 1069, (1071), 1153
 King, J. R., XI, 13, 1460
 King, K. M., XIV, 664
 King, M. E., XII, 436, 437
 King, N. J., XII, 1026
 Kinoshita, S., XI, 1170
 Kiper, N. O., XIV, (1545)
 Kiplinger, D. C., XII, 535; XV, 363
 Kirk, M. M., XI, 1493; XII, (295)
 Kirkpatrick, A. F., XII, (1328)
 Kirkpatrick, H., XI, 506
 Kirkpatrick, H. F. W., XII, (295)
 Kirkpatrick, T. W., XII, 1047
 Kisileva, V. V., XIV, 1229
 Kišpatič, J., XV, (1852)
 Kitchener, J. A., XIII, 635; XIV, 1647
 Kivilaan, A., XI, 418
 Kjellander, E., XIV, 215, 266; XV, 1602
 Klaas, H., XI, 973
 Klang, C., XV, 67
 Klang, C. A., XIII, (727)
 Klassen, J., XIV, (412); XV, 677
 Klawitter, G., XIV, (729)
 Kleber, W., XIV, (412)
 Klechetov, A. N., XIII, 504
 Kleczkowski, A., XIV, 1703; XV, (227), 544
 Klee, H., XI, 1185
 Klein, H. Z., XIV, 1327
 Klein, V., XI, 562
 Klemm, M., XII, 527
 Kliggmann, A. M., XII, (982); XIV, 818, (1298), 1802
 Kline, L. V., XI, 741; XIII, 1229
 Klinkenberg, C. H., XI, 255
 van der Kloot, W. G., XI, 684
 Klotz, L. J., XI, 155, 1326; XII, 216, 1003, 1005, 1143; XIII, 257, 551, 974, 1474; XIV, 843, 1322, 1324, 1821, 1839, 1853; XV, 4, 256, 257, 1219, 1887
 Klougart, A., XV, 600
 Knapp, O., XII, 945
 Kneen, T. H., XV, 1408
 Knight, A., XI, 632
 Knight, A. T., XII, (1270)
 Knight, C. A., XII, (1454); XIII, (487), (893)
 Knight, G. D., XV, (1852)
 Knight, H., XIII, 449
 Knight, P., XIV, (1932)
 Knjazev, A. A., XIV, 1806
 Knoblauch, H. C., XII, (736)
 Knott, J. E., XI, 1240; XIII, 210
 Knowles, D., XIII, 408; XV, 1667
 Kobel, F., XI, (648); XIV, 98, 1525; XV, 38, 1419, 1448, 1469, 1519, 1543, 2079
 Koberidze, A. V., XV, 19
 Koblet, R., XII, 759
 Koblitsky, L., XIII, 1338; XIV, (635)
 Kobozev, V. V., XIV, 101
 Kočerzenko, I. E., XII, 745
 Koch, D. E. V., XII, (273); XIV, (365)
 Koch, L. W., XI, 1285; XIII, 520, (1363); XIV, 1202
 Koch, P., XIV, 1188
 Kocherzhenko, *see* Kočerzenko
 Koernicke, M., XV, 46
 Koessnoto, —, XII, 250
 Kohake, E., XIV, 936
 Kohanovskaja, L. N., XIV, 1065
 Köhler, E., XII, (1390); XIII, (877); XIV, 571, (635), (691); XV, (1853)
 Kohli, K. L., XI, (248)
 Kohls, H. L., XI, 1246
 Kohnke, —, XII, 1011
 Koleff, N., XIV, 763, 772
 Kolehishvilli, M., XI, 1375
 Kolehishvilli, M. V., XI, 917
 Kolesnik, I., XV, 1132
 Kolesnikov, B. P., XIV, 1724
 Kolesnikov, V. A., XII, 840
 Koljasev, F. E., XV, 1369
 Koloberdina, Z. I., XIV, 244
 Kolodny, L., XII, (736)
 Kolossov, I. I., XV, 147
 Kondô, M., XI, 1078
 Königmann, E., XIV, (220), (710); XV, 1529
 Konis, E., XIII, 689
 Konishi, S., XI, (131)
 Konlechner, H., XIV, 568
 Konold, O., XIII, 939
 Kononov, I. N., XV, 148
 Koo, E. C., XIV, (1142)
 van Koot, Y., XIV, 1757
 Kopetz, L. M., XIV, 809
 (Kordes, H.), XIV, 106
 Korneichuk, V. D., XI, 1141
 Korschunoff, I., XI, 1375
 Korschunov, K. N., XIII, 384
 Korsmeier, R. B., XII, 564, 1473; XIV, 1847
 Koso-Poliansky, V. M., XIV, 1306
 Kostenko, V. D., XIV, 1397
 Kotov, M. I., XV, 430
 Kotte, W., XIII, 794; XIV, 689, 1704
 Kotthoff, P., XIV, (1312)
 Kouksenok, *see* Kuksenok
 Kovalev, N. V., XIV, 480, 1134
 Kovalevskaja, P. Ja., XV, 1670
 Koydl, S., XIV, 466
 Krajevoy, S. J., XII, (1195)
 Kramer, A., XI, (1137); XIII, 72; XV, 515
 Kramer, B., XV, (1336)
 Kramer, M., XI, 798; XIII, 316, 871
 Kramer, P. J., XI, 363, (695); XIII, 353, 787; XIV, 296; XV, 960, 1385
 Krantz, F. A., XII, (158), (1390); XIV, 174
 Krasilnikov, P. K., XV, (245)
 Krasinskii, N. P., XIV, 1086; XV, 958
 Krasnoselskaya, T. A., XIII, 356
 Krassilnikov, N. A., XV, 969
 Kraus, E. J., XI, 5, 1062
 Krauss, B. H., XIV, 899
 Kravchenko, P. N., XII, 925
 Kraybill, H. R., XIV, 1963
 Krehl, W. A., XV, (1336)
 Kreier, G. K., XV, 174, 392
 Kremer, J. C., XV, 1757
 Kreutzberg, V. E., XIV, 1126
 Kreutzer, W. A., XII, 850, (1390); XV, 733, 734
 Kreyer, G. K., XI, 574
 Krickl, M., XIV, 741, 752, 1251
 Kriel, H. T., XIII, 1186
 Kriel, P. E., XV, 61
 Krishna Iyengar, C. V., XIII, 1119
 Kroeger, H., XIV, 278
 Krone, B. P., XIV, 1773
 Kronenberg, H. G., XV, 1562, 1563
 Krotkov, G., XII, 276
 Krueger, W. C., XIII, 1600
 Kruft, F., XI, 395; XII, 426
 Krug, C. A., XIII, 595, 1463; XIV, (858), 1318
 Krüger, E., XV, 626
 Krüger, M., XV, 193
 Kruglov, A. I., XIV, 45
 Krumholz, G., XIV, 523
 Krupenikov, I. A., XV, 236, 1849
 Krüssmann, G., XV, 465
 Krutikov, N. E., XIV, 462
 Kuanyşgaliev, A. B., XIV, 519
 Kubli, M. G., XV, 1796
 Kubota, H., XI, 980
 Kuchel, R. H., XV, 2040
 Kucinski, K. J., XV, 1730
 Kudzjavceva, A. A., XIII, 1335

AUTHOR INDEX

- Kuennen, D. J., XV, 569, (599)
Kugler, W. F., XI, (131)
Kuhn, E., XIV, 440
Kuilmán, L. W., XII, 599
Kuksenok, A., XI, 858
Kulash, W. M., XIV, 671
Kulikov, A. I., XIII, 721
Kulitiasov, M. V., XIII, 1384
Kumar, L. S. S., XIII, (1369); XV, 1239
Kumm, J., XV, (1406)e
Kundu, B. C., XIII, 884
Kuneman, J. H., XI, 217
Kung-Hsiang, L., XII, 853
Kunin, R., XIV, 1027
Kunkel, L. O., XII, 541, 849; XV, (598)
Kuntz, W. A., XI, 1323
Kuprevič, V. F., XIV, 989
Kupzow, A. J., XIII, 501
Kurencova, G. E., XV, 657
Kusmitschewa, T. G., XI, 446
Küster, E., XIV, (729)
Kuzmin, V. I., XI, (1092)
Kuznetsova, A. P., XV, 160
Kuznetsov, P. V., XIII, 1172
Kvicala, B., XV, 546

van der Laan, P. A., XI, 556
Laborde, R., XI, 912
Lacey, J. W., XIV, 1034
Lacey, M. S., XII, 438
Lachance, R. O., XIII, (231)
Lachman, W. H., XI, (1238); XIV, 272; XV, 684
Lachover, D., XI, (171)
LaDue, J. F., XIV, 1841
LaDue, J. P., XIV, 854, 1852, 1854; XV, 261
Laffond, P., XV, 1885
LaFollette, J. R., XII, 568; XIII, 563
Laibach, F., XIV, (458)
Lai-Yung Li, XII, 401; XIV, 860, 1263
Lake Alfred Citrus Experiment Station, XI, 1318
Lakin, H. W., XII, 34
Lal, B. N., XV, 1685
Lal, G., XI, 627, 637, 1467, 1482, 1484; XII, 689; XIII, 1606; XV, 351, 503, 892
Lal, K. B., XV, 1601
Lal, T. B., XV, 731
Lalla, C. D., XII, 1035
Lal Singh, XI, 142, 144, 220, 222, 225, 227, 237, 239, 627, 637, 1093, 1094, 1482, 1484; XII, 554, 665, 689, 993, 1462; XIII, 1028, 1045
Lamb, J., XI, (641); XII, 616, (708)
Lamb, J., Jr., XIII, 1111
Lamb, T. R., XV, 299
Lambers, M. H. R., XI, 198; XII, 620
Lambert, E. B., XI, 1277
Lamerson, P. G., XIII, 1296
Lamm, R., XIII, 1090; XIV, 636; XV, 129, 138, 1770
Lammers, R. P., XI, 203, 1403
Lammerts, W. E., XI, 705; XII, 61, 764; XIII, (998); XIV, 490; XV, (1006)
Lamour, R., XIII, 705, 966
Lampitt, L. H., XIII, 1581; XV, 328, (2059)l, (2059)m
Lana, E. P., XII, (1390)
Lancaster-Jones, E., XIII, 373
Landau, N., XIII, 673
Landbouwkundig Instituut, XI, 563
Landon, R. H., XIII, (81); XIV, (161); XV, 1507
Landon, W. E., XIV, 844
Lane, M. C., XI, 694
Lane, R. V., XIII, 1518
Lang, A., XIV, (1030)
Lang, J. M. S., XIII, 515
Lange, D. F., XI, 536
Lange, E. G., XI, 386
Lange, W. H., Jr., XV, 1130
Langford, G. S., XII, 1352; XIV, 1684; XV, 1609, 1610
Langford, M. H., XI, 758; XII, (462); XIV, (161), 1912
Langham, D. G., XI, 678; XV, (227), (431)
Langlands, I., XII, (736)
Langstroth, G. O., XI, 1080
Lanson, H. J., XV, 1126
Lantz, H. L., XII, 1287, 1288
Lapage, G., XV, 120
Lapin, V. K., XII, 757
Large, E. C., XI, 643, (821); XII, 918, 933; XIII, 472
Large, J. R., XIV, (1875)
Larmat, L., XIV, 535
Larmour, R. K., XIV, 702, 703; XV, (1853)d
Larsen, G. H., XIV, 1494
(Larsen, H.), XIV, 1121
Larson, C. A., XIII, (67)
Larson, P. S., XIV, (1431)
Larson, R., XI, 1247
Larson, R. E., XIV, 283; XV, 725, (758), (1852)v
Larson, R. H., XI, (1244); XV, 211
Larsson, B., XIV, 378
Larsson, G., XV, 448
La Rue, C. D., XV, 431
Lasaroff, A. W., XI, 432
Lasser, T., XV, (1298)
Lathorp, E. C., XV, 1335
Lathrop, F. H., XII, 1320; XIV, (1545)
Latikova, O. T., XIV, 1291
Latimer, L. P., XIV, 99, 1521, 1573
Laubscher, F. X., XIV, 1188
Lauche, K., XIV, 771; XV, 636
Laude, H. M., XII, 145
Laufer, M. A., XII, (1454); XV, (227)
Läuger, P., XV, 117, 1650
Laumont, P., XV, 1144, 1726
Laurie, A., XI, 320, 502; XII, 197, 535, 1564; XIII, (245); XIV, 223, 1719; XV, 363, (774)
Laurie, M. V., XII, 224
Lausanne, *see* Station fédérale d'Essais
Lava, V. G., XI, 1486; XII, 308
Lavalee, E., XIII, 1627
Lavrijchuk, V. S., XV, 1884
Lawless, W. W., XI, 857
Lawrence, G. H. M., XIII, 1399
Lawrence, W. J. C., XI, 1508; XII, 350, 537; XIII, 536; XIV, 1203; XV, 1088, 1089, 1090, 1091, 1093
Lawrey, V. L., XII, 456
Lawson, R. E., XV, (758)
Lazo, F. D., XI, 1443
Lea, A., XI, (1178)
Leach, J. G., XI, 644; XV, (128)
Leach, L. D., XI, 470, (1235); XIII, 292; XIV, (1476); XV, (598), 1182
Leach, R., XI, 604, 956, (965); XII, 617
Leach, W., XIV, (1476); XV, 1390
Leão, M. de A., XV, 1070
Lear, B., XV, 741
LeBeau, F. J., XV, (1853)k
Lebedeva, L. A., XV, 226
Lebedeva, T. A., XIV, 1105
LeClerc, E. L., XII, (982); XIII, (474), 870
Ledeboer, M. S. J., XI, 906
Lee, C., XIII, 1328
Lee, F. A., XI, 119, 976; XII, (674); XIII, 390
Lee, G. A., XIII, 1205
Lee, S. L., XIV, 721
Lee, S. W., XV, 425
Leek, F. H., XII, 188
Lees, H., XIV, 1203
Lees, P. M., XI, 967, 1007
van Leeuwen, E. R., XIV, 143
van Leeuwen, W., XII, 602
Lefebvre, C. L., XV, 1839
(Lefèvre, P. C.), XV, 840
Lefèvre, P. C., XV, 298
Leggatt, C. W., XI, 353; XIII, (139)
Lehane, J. J., XI, (695)
Lehmann, E., XII, 1136
Lehmann, E. W., XII, 36
Lehmann, H., XII, (367)
Lehmann, P., XIV, (19)
Lehr, J. J., XII, 160, (982)
Lein, J., XI, 469
Lelesz, E., XIV, (926)
Leley, V. K., XIV, 894
Lembo, F. E., XIV, 1422
Leme, Z., XIII, 544
Lemke, M., XII, 1532
Lemmon, P. E., XIII, 701
Lenander, S. E., XIII, 1090; XV, 129, 601, 1508
Lendner, A., XIV, 1472
Leniger, H. A., XII, (1142)
Lenin Academy of Agricultural Sciences, XV, 948
Lennox, F. G., XIV, 396
de Leon, J., XI, 841
Leonard, A. S., XI, 153
Leonard, E. R., XI, 617, 1457; XII, 282, 1108

AUTHOR INDEX

- Leonard, O. A., XII, 705; XIV, 322, 1013
 Leonard, R. H., XIV, 402, 521
 Leonard Hill Ltd., XII, 315
 Leonov, I. V., XII, 843
 Leonova, M. I., XII, 1416
 Le P., R., XII, 1510, 1511
 Le Pelley, R. H., XI, 204; XII, 1509; XIII, 1014; XV, 839
 Lepesme, P., XV, (1298)
 Lepik, E., XII, 196
 Lerch, K., XV, (2011)c
 Le Riche, F. J. H., XV, 889
 Le Rosen, A. L., XII, (513)
 (Leroy, J. V.), XV, 840
 Lesjuk, E. A., XIII, 1034
 Lesley, J. W., XIV, (268), 1046, 1278; XV, 455, 458
 Lesley, M. M., XIV, (268)
 Leslie, L., XV, 900
 (Lesourd, F.), XV, 1014
 Lester, A. H., XIV, 1343
 Leukel, R. W., XI, (380)
 Leuthold, R., XIII, 1575
 Levadoux, L., XV, 1516, 1525, 1589, (1658)f
 Lever, R. J. A. W., XI, (608)
 (Leverhulme Trust), XIV, 1442
 Levert, P., XII, (1518)
 Levickaja, A. M., XV, 28
 Levin, C., XIV, 1705
 Levin, E., XV, (2059)e
 Levina, F. J., XV, 146
 Levine, A. S., XI, (984); XII, 790; XIII, 41
 Levine, M., XI, 469; XV, 970
 Levitt, E. C., XI, 516; XII, 215, 1001; XV, 1199, (1232)
 Levitt, J., XI, 365, 366; XII, (1390); XIII, 904; XV, 918
 Levoshin, V. K., XIV, 506
 Levy, L., XI, 1495
 Levy, L. F., XIV, (1431), 1962
 Lewcock, H. K., XII, 1091
 Lewinsohn, R., XV, 1938
 Lewis, A. H., XIII, 1360
 Lewis, C. M., XII, 355
 Lewis, D., XII, 386, 387, 1293; XIII, (690), 1413; XIV, 503; XV, 1042
 Lewis, F. H., XV, 594, 1582
 Lewis, H., XV, (432)
 Lewis, H. C., XII, 568; XIII, 563, 564; XIV, 851
 Lewis, J. C., XII, 28
 Lewis, R. D., XII, 416; XIV, 1187; XV, 523
 Lewis, R. W., XV, 1028
 Lewis, S. E., XV, (1309)
 Lewis, V. M., XIV, 1759
 Ley, G. J., XIV, 303
 Leyerle, D. B., XV, 659
 Leyvraz, H., XV, (83)
 Li, J. C. R., XV, (432)
 Li, L. Y., XIV, 10
 Li, Lia-Young, C. H., XV, 93
 Lichtenberg, P., XV, 411
 Liebermann, J., XV, 108
 Liebig, G. F., Jr., XI, 147; XIII, 1472; XIV, 304; XV, 418, 419
 Ligon, L. L., XV, 1705
 Ligoule, M. J., XIV, 978
 Lihnell, D., XIII, 1458; XIV, 247, 548
 Lilleland, O., XII, 1251; XIII, 1184, 1254
 Liman, H. K., XIII, 864; XIV, 179
 Lin, K. R., XV, 648
 Lincoln, C. G., XII, (1347)
 Lincoln, F. B., XII, 49, 50; XIII, 816, 1169
 Lincoln, R., XIV, 872
 Lind, H. Y., XIII, 269; XIV, (1370)
 Lindblom, A., XIII, 831; XIV, 148
 Lindeman, B. W., XI, 295; XIV, 1098
 Lindemuth, K., XIII, 865
 Linden, S. E., XIV, 91; XV, (1852)w
 Lindenbein, W., XI, 476
 Lindford, T., XI, 745
 Lindfors, T., XIII, 376, 1343; XIV, 550
 Lindgren, D. L., XI, 1331, 1333, 1334; XII, 1478, (1480); XIII, (260), 559, 560, 1481, 1482; XIV, 1655, 1841, 1853; XV, 261, 262, (270), 795
 Lindner, R. C., XIII, 749, (845); XIV, 1008, 1571; XV, 535
 Lineberry, R. A., XII, 832; XIII, 1041, 1577; XIV, 554; XV, 519
 Linford, M. B., XII, 770; XIII, 1029
 Ling, A. W., XIII, 1076
 Ling, L., XV, 648
 Link, C. B., XIII, (245)
 Link, G. K. K., XII, 173; XIV, (458)
 Link, K. P., XIII, 1408; XV, 1101
 Linke, W., XIII, (897)
 Linn, M. B., XI, 806; XII, 952; XIII, (101)
 Linnman, N., XIV, 551
 Linsbauer, L., XI, 505
 Linsley, E. G., XIV, 864; XV, 2010
 Lintzel, W., XIV, 1296
 Lio, E. S., XV, 642
 Lipšic, S. J., XV, (1852)x
 (Lisavenko, M. A.), XIV, 461
 List, G. M., XIV, 938; XV, 216
 Little, T. M., XIII, 241
 Little, V. A., XII, 1343
 Littler, R. J., XIII, 888
 Litzendorff, J., XIV, 1402
 Liu, Ch.-H., XV, 14
 Livingston, J. E., XIV, 178; XV, (227)
 Livingston, R., XI, (31)
 Livingstone, E. M., XIII, (451)
 Ljubočko, O. N., XIV, 39
 Ljov, S. D., XIV, 683
 Lloyd, D. C., XIV, (1662)
 Lloyd, J. W., XI, (821); XIII, 625; XIV, 527
 Löbbeck, H., XV, (758), 1179
 Lochhead, A. G., XI, (291)
 Locke, S. B., XII, (462); XV, 584, (598)
 Loconti, J. D., XII, (708); XIV, 1992
 Loeffler, H. J., XII, 299
 Loehwing, W. F., XI, 370
 von Loesbeck, H. W., XI, 298, 300
 Loeser, E., XII, (1536)
 Loest, F. C., XII, 1471; XIII, 552
 Loewel, E. L., XI, 612; XII, 391, 427, 428, 429; XIII, 737, 844; XIV, 569
 (Loewel, E. L.), XV, 481
 Loewen, P. R., XIII, (67)
 Logan, S. H., XIV, 790
 Lojkin, M. E., XV, (758)
 Lombard, P. M., XII, (1390); XIV, 1666
 Lombard, T. A., XIV, 1851
 Lominadze, G. S., XI, 1011
 Long, E. M., XI, 1260; XIII, 999, 1185; XIV, 779
 Long, J. D., XII, 1126
 Long, T. E., XV, 1667
 Long Ashton Research Station, XIV, 2024
 Longley, L. E., XIII, 12
 Loo, S.-W., XV, (758)
 Loo, T.-L., XV, (34), 427, 971
 Loomis, H. F., XII, 1514; XIII, 175
 (Loomis, H. F.), XIII, 289
 Loomis, N. H., XIV, (110)
 Loomis, W. E., XII, 767; XIV, 985; XV, 410
 Loos, C. A., XI, 1368; XII, 241
 Lopes, L. S., XV, 845
 Lorant, M., XII, 963
 Lord, L., XIV, 1881
 Loree, R. E., XI, 1136; XV, 1425
 Lorenz, A. J., XI, (1506)
 Lorenz, O. A., XII, 159, 471; XIII, 195, 210, 1390; XIV, (1298), 1755
 Lott, R. V., XII, 1269; XIV, 1068, 1938
 Lou, Ch.-H., XV, 14
 Loughnane, J. B., XII, (480)
 Louis, L., XII, 704
 Lounsberry, C. C., XV, 1017
 Loustalot, A. J., XII, 119; XIV, 114; XV, 525, 595
 Louw, A. J., XIV, 1124, 1144; XV, (128)
 (Love, H. T.), XIV, 943
 Love, K. S., XV, (1406)c
 Lowe, B., XIV, 369
 Lowenhaupt, B., XIII, 497
 /Lowig, E., XI, 493
 Lowman, M. S., XIV, (635)
 Lozet, F., XIV, (2003)
 Lozovskij, T. A., XIII, 717
 Lubatti, O. F., XV, (1185)
 Lucas, E. H., XV, 1028, (1336), (2059)n
 Lucas, H., XIV, 1430
 Lucas, H. E., XIII, 200
 Lucas, I. B., XIII, 735
 Luce, W. A., XIV, 587; XV, 535
 Luckan, F., XII, 1231, 1280

AUTHOR INDEX

- Luckan, J., XII, 1224
 Luckwill, L. C., XIII, 199
 Lucy, A. B., XI, 928, 1426
 Ludbrook, W. V., XII, 841
 Ludwig, C. A., XI, 367
 Ludwigs, K., XIV, (290)
 Lueck, R. H., XI, 623
 Lugeon, A., XIV, 1032
 Lugeon, A. R., XII, 382; 1218
 Lugg, J. W. H., XIV, 408
 Lumsden, D. V., XI, (1300)
 Lund, A. P., XIII, (697)
 Lundegårdh, H., XIII, 5, (367),
 372, 1124; XIV, 1016
 Lundell, C. L., XIII, (1553)
 Lundin, Y., XIV, 472, 526, 1037,
 1038; XV, (505)
 Lute, A. M., XIV, 278
 Lüthi, E., XV, 1581, 2043, 2046,
 (2059)o, (2059)p, (2059)q,
 (2059)r
 Luthra, J. C., XIV, 332
 Lutman, B. F., XI, (1229)
 Lutscher, A. M., XIV, (918)
 Lutz, J. M., XII, 569
 Lyle, E. W., XV, 766
 Lyle, J. A., XIV, (547)
 Lyman, C., XIII, 295
 Lyman, W. C., XI, 716
 Lynch, L. J., XV, 349
 Lynch, P. B., XII, 161, 529
 Lynch, S. J., XI, 883, 885, (887),
 (891), 948, 979, (1012), 1348;
 XV, 776, 1908, 1910, 1947,
 1977, 1986
 Lyness, M. M., XII, (462)
 Lynes, F. F., XIII, 888
 Lyon, A. V., XII, 834; XIII, 83
 Lyon, C. B., XII, 177, 974, 1432;
 XIII, 1420; XIV, 1272, 1275,
 1765, 1766, 1770
 Lyon, C. J., XII, (1112)
 Lysenko, T. D., XII, 1063, 1369
 Lythgoe, H. C., XII, (708)

 M., B. Y., XV, (1865)d
 M., D., XII, 506
 M., N., XI, 1409
 M., W., XIII, 838
 McAlpin, D. M., XI, 1127
 MacArthur, M., XI, 1298; XII,
 62; XV, 1308
 Macaulay Institute for Soil Re-
 search, XIII, 368; XIV, 1443;
 XV, 1354
 McBeth, C. W., XV, 567
 McBeth, I. G., XI, 1335
 McBurnie, H. V., XIII, 557, 561;
 XIV, 1325
 McCallan, S. E. A., XI, 376; XIV,
 263, (635); XV, 583, (598)
 McCallum, R. D., XI, 728
 McCann, H., XV, 1409
 McCann, J. McC., XIII, 880
 McCann, L. P., XII, 226; XIII,
 (566); XV, 1907
 McCay, C. M., XV, 326
 McClean, A. P. D., XII, (194)
 McClellan, W. D., XIII, (123),
 1456; XIV, 1233; XV, 770
 McClelland, C. K., XV, 1981
 McClintock, J. A., XI, 657; XII,
 1227; XIII, 1168; XV, 468
 McClure, F. A., XV, 823
 McClure, T. T., XII, 966
 McCollam, M. E., XI, 1313
 McCulloch, L. P., XIV, 1942
 McCollum, J. P., XV, 718
 McConnell, J. E. W., XV, 881
 McCool, M. M., XI, 685; XII,
 1205; XV, (1406)d, 1654, 1773
 McCornack, A. A., XI, 303
 McCown, M., XIV, 507
 McCreary, C. W. R., XIV, 341
 McCubbin, E. N., XI, 1220
 McCubbin, W. A., XV, 1993
 McCulloch, L., XIV, 1812
 McDaniel, E. I., XII, 870; XIV,
 (297)
 MacDaniels, L. H., XI, 48, (737);
 XII, 1235; XV, 477
 McDermott, J. J., XI, 676, 1083
 McDermott, N., XV, 1109
 McDiarmid, R. W., XII, (1270)
 Macdonald, K. R., XIII, 610
 McDonald, W. J. B., XII, 935
 McDonough, E. S., XIV, 243
 McDonough, J. V., XIV, 1999
 MacEachern, C. R., XII, 397,
 460
 McEvoy, E. T., XII, 939
 McFarlane, J. S., XIV, (193)
 McFarlane, V. H., XI, (291)
 McFarlane, W. D., XV, 2021
 Macfaydn, E., XIII, 1019
 MacGillivray, J. H., XI, 408;
 XIII, (231), 1332, 1423; XIV,
 645, 1194, 1195, 1196, (1803)
 McGillivray, K. D., XIII, 401,
 724, 1139; XIV, 500, 1544;
 XV, 490, 1533
 McGoldrick, F., XI, 1221
 McGonagle, M. P., XIV, 1014
 McGrath, J. V., XI, 56; XIII, 40;
 XIV, 79, 1526, 1527
 McGregor, E. A., XII, 1472;
 XIII, (562), 996; XIV, 852,
 (858), 1848; XV, 794, 797
 McGuire, E. G., XII, 294; XV,
 1320
 Machado, O., XV, 854
 Machado, V., XV, 832
 Machado, W., XIV, 1627
 McHargue, J. S., XI, (1092);
 XII, (1195), 1431; XIII, (227);
 XIV, 782, 1274, 1276; XV,
 405, 697, 1143
 McIlhenny, E. A., XV, 1217
 McIntyre, N. E., XIV, 157, 632
 McIntroy, S. W., XV, (596)
 McIntosh, A. E. S., XI, 224; XII,
 (659)
 McIntosh, J., XIV, (926)
 McIntyre, G. A., XIV, 465
 Mack, G. L., XI, 284; XIII,
 1277; XV, (598)
 Mack, W. B., XI, 118, 477; XII,
 178, 512; XIII, 222, 310;
 XIV, 4, (268), 1512; XV, 729
 McKay, J. W., XIII, (1235)
 McKay, R., XI, 100; XII, (1318);
 XIII, 1276, 1436; XIV, (1816);
 XV, 738
 McKee, R. K., XI, 949; XIV,
 343, 1902, 1903, 1905
 McKenna, G. F., XI, 767
 McKenzie, H. A., XV, (2059)s
 MacKenzie, P. B., XI, (1128);
 XIV, 522
 McKenzie, W. F., XV, 1477,
 1798
 Mackevič, P. P., XV, 201
 MacKinney, G., XI, 1489; XII,
 296, (311), 1555; XIII, 1066;
 XIV, 560
 McKinney, H. H., XIII, (231),
 (893); XIV, 686, (1298)
 McKinney, K. B., XIV, 1750
 McKinney, L. L., XI, (641)
 McKinnon, L. R., XIV, (19)
 Mackintosh, D. L., XIV, 1934
 McKnight, T., XI, 1440
 MacLachlan, J. D., XIV, 1247
 McLaughlin, J. H., XV, (1852)k
 McLean, D. M., XV, 1758
 Maclean, G. A., XV, 999
 McLean, H. C., XIV, 150, 1679
 McLean, J. G., XI, 1243; XII,
 (1390); XIII, 505
 McLean, L. G., XV, 647
 McLean, R., XI, 130
 McLean, R. A., XIII, 891
 McLean, R. C., XII, 312
 MacLeod, D., XIV, 588
 MacLeod, W. S., XIV, (1662)
 MacLinn, W. A., XI, 303
 McMaster, P. G. W., XII, 622;
 XIII, 1011
 MacMasters, M. M., XIII, (335)
 McMunn, R. L., XI, 1157; XII,
 1292; XIII, 1191; XV, 1467
 McNair, J. B., XV, (972)
 McNaught, J. B., XII, 1341
 McNaughton, F., XV, 125
 McNew, G. L., XIII, 228
 Mácola, T., XIV, 846
 McPhail, M., XII, (235); XIV,
 250
 McPherson, G. K., XIII, (883)
 (Macpherson, N. J.), XIV, 654
 Macpherson, N. J., XV, 1154
 McRary, W. L., XI, (31); XIV,
 1723; XV, (1336)
 MacRiil, J. R., XI, 265; XIII, 628
 Macself, A. J., XIV, 416
 McTaggart, A., XIII, 2
 McVeigh, I., XI, 345
 MacVicar, R., XI, 1223
 McWhorter, F. P., XV, (597)
 McWhorter, O. T., XI, (405),
 1173; XIV, 546
 Madden, A. H., XII, (982)
 Mäde, A., XII, (351), (791)
 Mader, E. O., XIV, 817, (834)
 Madhok, M. R., XIII, 1434
 Madras Department of Agricul-
 ture, XI, 1033, 1034, 1516;
 XIV, 961; XV, 381, 936
 Madueño, M., XV, 1722
 Madueño Box, M., XIII, 901;
 XIV, 694; XV, 1724, 1736,
 1741, 1777
 Maekawa, T., XIII, (31)
 Magee, C. J., XIII, 211
 Magee, C. J. P., XI, 243

AUTHOR INDEX

- Magic, R. O., XIV, 1223; XV, 161, (598)
 Magill, W. W., XII, (462)
 Magistad, O. C., XI, (689); XIII, 695, 1118; XIV, 282; XV, 961
 Magness, J. R., XII, 74; XIII, 34, 680; XIV, 70, 1534
 Magnicki, K. P., XII, 822
 Magnusson, K., XIV, 473; XV, 445
 Magoon, C. A., XI, 1139
 Magruder, R., XIII, 25, 132
 Mahalanobis, P. C., XV, (432)
 Maher, F. A., XII, 485, 516, 968; XIII, 929
 Mahmud, K. A., XV, 295, 1288, 1289
 Mahngar, B. S., XI, 221, (1420)
 Mahoney, C. H., XIII, 1052, (1454); XIV, (2003)
 Maier, W., XI, (77); XII, 622, 1300, 1311; XIV, 573, 1125, 1139, 1264; XV, 532, 695, 1551
 Maine Agricultural Experiment Station, XII, (406), (462), 714, 1155, 1156, (1270), (1347); XV, 973
 Maiwald, K., XIV, 643
 Major, F., XV, 1925, 1949, 2053
 Makarevitch, T. N., XIV, 722
 Makarov, D. D., XIV, 42
 Makarov, N. P., XIV, 21
 Makarova, N. A., XIV, 1686
 Maksimov, B., XV, 1806
 Maksimov, N. A., XIV, 436; XV, 170, (227)
 Maksimov, N. M., XII, 1404
 Maláč, V., XIII, 805
 Malan, E. F., XIV, 1050
 Malaya Department of Agriculture, *see also* S.S. and F.M.S., XI, 1035, 1036; XII, 328, (337)
 Malaya, Rubber Research Institute, XI, 215, 216, 939, 1043; XII, 255, 716
 Malherbe, I. de V., XIV, (1083)
 Malik, S. A., XIV, 1599
 Malisoff, W. M. (Editor), XIV, 2009
 Maljugin, A. A., XV, 408
 Mallik, P. C., XI, 947
 Maltais, J. B., XI, 1274
 Mamet, R., XI, (608)
 Manchester, T. C., XIV, 1991
 Maney, T. J., XI, (737); XII, 99, 1291; XIV, 1089
 Mangan, J. L., XV, (2060)a
 Mangat, S. S., XV, 1321
 Mangat, S. S. S., XV, 350
 Manis, H. C., XI, 800
 Mann, C. E. T., XI, 212
 Mann, H. D., XIV, 1648
 Mann, H. H., XI, 808
 Mann, L. K., XII, (752); XIV, 767, 1979
 Manning, K. R., XI, (1278)
 Manning, T., XV, (1185)
 Manns, T. F., XIII, 984; XIV, 1331
 Manrique, A. A., XV, 1918
 Mansfield, B. P., XIII, 1107
 Manskaja, S. M., XV, 1751
 Manson, T., XII, 941
 Mantel, E., XIV, 733
 Manuel, H. L., XI, 1143; XIII, 626
 Maplestone, C., XIV, 514
 Mappes, F., XIV, 750
 Mapson, L. W., XI, 1499; XIV, 934; XV, 329, (2059)t
 Marais, J. G., XV, 1794
 Marani, M., XI, 435, 703
 Marchant, W. L., XV, 725
 Marchionatto, J. B., XIII, (1238)
 Marcus, A., XV, 1974
 Marcus, O., XIV, (1803)
 Marengo, L. V., XIV, (710)
 Margolin, A. P., XIV, 48
 Margolin, D. L., XV, (34)
 Margolina, K. P., XIV, 650
 Mariat, F., XV, 1188
 Markham, R., XIV, 1702, 1710
 (Markov, F. L.), XIII, 1281
 Markov, N. V., XIII, 723
 Marks, G. H., XIV, 1217
 Markwood, L. N., XI, 499, 508; XIII, 1364, (1369)
 Marmoy, J. C., XIII, 1006
 Marmoy, C. J., XI, 659
 Maroc, Bureau de la défense des végétaux, XIII, 426, 437, 572
 Marques, J. Q. A., XV, (865)
 Marques de Almeida, C. R., XII, 204; XIV, 162
 Marriott, J. W., XV, 142
 Marsh, G. L., XII, 302, 1543
 Marsh, P. B., XV, (599)
 Marsh, R. H., XII, 579, 582
 Marsh, R. L., XII, (708)
 Marsh, R. S., XIV, (161), 1485, 1515
 Marsh, R. W., XI, 799; XII, 887, 931; XIII, 1316; XIV, 1640; XV, 1577, 1619
 Marshall, G. E., XII, 126; XIII, 112; XIV, 145
 Marshall, G. W., XII, (1496); XIII, 377
 Marshall, J., XI, 433; XII, 877; XIII, 111; XV, 1618
 Marshall, J. B., XV, 2020
 Marshall, R. E., XI, 626; XIII, 744, 761, 1036; XIV, 388, 1935, 1936; XV, (2059)u
 Marshall, T. J., XIII, 22
 Marshallburn, A. R., XII, 581
 Marsh-Smith, E. C., XIV, 1891
 Marston, H. R., XIV, 1957
 Marten, E. A., XV, (128)
 Marth, P. C., XI, 750; XIII, 238; XIV, 226, 292, 720; XV, 422, 510, 581, 870, 1491, 1702
 Martin, F. J., XI, 173
 Martin, G., XIV, 716
 (Martin, G. R.), XIV, 889
 Martin, H., XI, 775, (779), 799; XII, 931, (1347); XIII, 122, 1236, 1314; XIV, (635), 1644; XV, 117, 121, 1649, 1650, 1657
 Martin, J. P., XIV, 1522
 Martin, J. T., XI, 180, 437; XII, (462); XIII, 447, 1319; XIV, (161)
 Martin-Lecoite, —, XV, 995
 Martin, R. H., XIV, 1556
 Martin, W. E., XII, 212
 Martin, W. H., XI, (1229); XII, (1390)
 Martin, W. J., XV, 1967
 Martin, W. R., Jr., XIV, 1085
 di Martini, F., XIV, 470
 Martini, S., XI, (984)
 Martyn, E.-B., XIII, 581; XV, 1294
 Masefield, G. B., XII, 600; XIII, 1504; XIV, 1927
 Mas-Guindal, A., XV, 1124
 Mas-Guindal, J., XV, 1124
 Mashtakov, S. M., *see* Maštakov
 Maslennikov, I. P., XIV, 169, 753
 Mason, A. C., XIV, 663
 Mason, I. C., XIII, 74; XIV, 1551
 Mason, T. G., XI, 27, 675
 Massachusetts Agricultural Experiment Station, XV, 937
 Massee, A. M., XI, 765, 1175, (1177), 1182; XII, 124, 1305, 1319, 1358, 1397; XIII, 894, 1284, 1290; XIV, 1610, 1616, 1624; XV, 1594, 1598, 1615
 Massey, Z. A., XII, (311)
 Maštakov, S. M., XII, 1067, 1416; XV, 1750
 Masters, F. J., XV, 985
 Masure, M. P., XIV, (2003)
 Mather, K., XI, 1076; XII, 505; XIII, 684; XIV, (458), 730; XV, 1184
 Mather, M., XII, 1181
 (Mathews, I.), XII, (39)
 Mathews, I., XIV, 1835
 Mathez, F., XIII, 568
 Mathis, W., XV, 1214, (1232)
 Mathison, I., XIV, (1476)
 Mathlein, R., XIII, 1570; XV, 585
 Mathot, H. J., XV, 2016
 Mathur, P. B., XV, 195
 Matiesen, D., XV, 1317
 Matjuk, L. S., XV, 233
 Matsubara, S., XIII, 52
 Matthews, E. M., XV, (1852)y
 Mattingley, G. H., XII, 927
 Matveev, V. P., XIII, 1213
 Matzkevich, *see* Mackevič
 Mauldin, M. P., XIV, 1302
 Maume, L., XV, 1125, 1513
 Maurer, E., XIV, 637
 Maurer, K. J., XI, 387; XII, 1295; XIV, 479
 Mauri, N., XI, (1300); XIV, 1492; XV, 337, 1881
 Mauritius, Chamber of Agriculture, XII, 718; XIV, 962
 (Mauritius Department of Agriculture), XIII, 1507
 Mauritius Department of Agriculture, XI, 1038, 1517; XII, (337), 717, (1584); XIV, 1444
 Mauritius, Sugarcane Research Station, XI, 1037; XII, (1584); XIV, (968); XV, (946)

AUTHOR INDEX

- Maximov, *see* Maksimov
 Maxon, M. A., **XI**, 1058
 May, A. W. S., **XIV**, 315, 1885
 Mayer, A., **XII**, 1394
 Mayer, A. M., **XV**, (1336)
 Mayer, E. L., **XIV**, 1645; **XV**, 1061, (1185)
 Mayer, I. D., **XV**, (2011)a
 Mayfield, H. L., **XI**, 105
 Mayhugh, M. S., **XI**, 728
 Maynard, L. A., **XI**, (131), 289, 1491
 Mayne, W. W., **XI**, 199; 201, 1382; **XII**, 626, 1506; **XIII**, 288, 1532; **XIV**, 326, 882, 1346
 Mazia, D., **XIII**, 9; **XV**, (431)
 Mazzolani, G., **XII**, 1214
 Mead, H. W., **XV**, (1658)r
 Mead, S. V., **XI**, (872)
 Meade, R. C., **XIV**, 402
 Meader, E. M., **XII**, 67, (85); **XIV**, 1587; **XV**, 510, 517, 1023
 Meadly, G. R. W., **XIV**, 1636
 Medina, E. H., **XV**, 1944
 Medina, J. C., **XII**, 1032
 Medler, J. T., **XV**, (599)
 Medvedeva, G. B., **XV**, 629
 Megee, C. R., **XII**, 882
 Mehliquist, G. A. L., **XI**, 1294; **XII**, (548); **XIII**, (1462)
 Mehring, A. L., **XV**, (972)
 Mehta, M. L., **XI**, 1356
 Mehta, T. R., **XII**, 1082; **XV**, 296
 Meier, K., **XI**, 328, 721, 1114; **XII**, 400, 1162; **XIII**, 94, 1225, 1250, 1251; **XIV**, 121, 374, 538, 545; **XV**, 44, 62
 (Meier, K.), **XIV**, 1451; **XV**, 944
 Meijburg, F. L. van der Kloot, **XIII**, 1206
 Meiklejohn, G. T., **XII**, (295)
 Meiklejohn, J., **XIII**, 643; **XIV**, (412)
 Melchers, G., **XIV**, (793), (1030)
 Melhus, I. E., **XV**, 1708
 Melin, E., **XIII**, 1122; **XV**, (758)
 de Mello, A. T., **XV**, 1937
 Mello, P. S., **XV**, 1252
 Mellor, F. C., **XV**, 96
 Melville, A. R., **XV**, 286, 838, 1254, 1941
 Melville, R., **XII**, 525, 948, 1282, 1451; **XIII**, 236; **XIV**, 407, (458), 823
 Melvin, E. H., **XII**, 26
 Mendes, A. J. T., **XII**, (627); **XV**, 835
 Mendes, C. T., **XV**, 573
 Mendes, J. E. T., **XI**, 531; **XII**, 648; **XIII**, 595; **XIV**, 1895
 Mendez, R., **XII**, 632
 Mendez Camacho, A., **XV**, 1742
 Mendoza, N. B., **XI**, (248), 1419; **XII**, 10
 Mendonça, F. A., **XIV**, (1370)
 Menendez (Lees), P., **XII**, 1096; **XIII**, 630, 645; **XIV**, 1382, 1384, 1385, 1419
 de Menezes, O. B., **XV**, 618
 Menon, S. R. K., **XIII**, 616
 Menzel, R., **XIV**, 139, 549; **XV**, 1626, 1627
 Menzies, J. D., **XIII**, 1278
 Mercado, T., **XI**, (248)
 Meredith, C. H., **XII**, 1090; **XIV**, 359, 1928
 Merkle, F. G., **XI**, 22; **XII**, 401; **XIV**, 653
 Merrill, S., Jr., **XII**, (229), 1488; **XIII**, 1490; **XIV**, 1861, 1862
 Merrill, T. A., **XIII**, 781; **XV**, 516, 1475, 1484
 Mertens, F., **XIV**, (1312)
 v. d. Merwe, A. J., **XIV**, 1832
 van de Merwe, C. P., **XIV**, (858)
 van der Merwe, D. J., **XII**, 1190
 Mestre, C., **XV**, 1588
 Mestre (Artigas), C., **XII**, (1142)
 Mestres, A., **XV**, 1588
 Metcalfe, B., **XV**, (2059)f
 Metcalfe, C. R., **XII**, 146, 1392; **XIV**, 1669
 Metcalfe, E., **XI**, 268
 van Meter, R. A., **XII**, 363, 783, (833); **XV**, (1535)d
 Metlicki, L. V., **XII**, 1109
 Meunissier, E., **XII**, 1447; **XV**, 950, 1076
 Meurman, O., **XIII**, 405, 407, 759; **XV**, 717
 Meyer, A., **XV**, (505)
 Meyer, B. S., **XI**, 642
 Meyer, H., **XI**, 467; **XII**, 1140
 Mezuev, P. A., **XIII**, 397
 Michael, G., **XIV**, 561
 Michailov, *see* Mihailov
 Michaltscheff, T., **XII**, 1398
 Michaux, R. M. E., **XV**, 1984
 Michel, L., **XIV**, 1345
 Michelbacher, A. E., **XV**, 1040, 1600
 Michels, H., **XII**, 1453
 Michener, H. D., **XI**, 1217
 Michurin, I. V., *see* Mičurin
 Mick, A. H., **XI**, 26
 Micklem, T., **XIV**, 1373, 1374, 1375; **XV**, 75, 867
 Mičurin, I. V., **XIV**, 24, 25, 26
 Middle East Supply Centre, **XV**, 938
 Middleburg, H. A., **XI**, 910; **XII**, (659)
 Middlekauff, W. W., **XII**, (462)
 van Middlesworth, L., **XII**, 811
 Middleton, G. K., **XV**, 1980
 Middleton, J. T., **XIV**, 1720, 1754; **XV**, 768
 Miden, G., **XV**, (758)
 Midgley, M. C., **XII**, 22
 Mied, C., **XIII**, 959
 Miège, E., **XIII**, 898; **XV**, 1709
 Migsch, H., **XII**, 464
 Miguel (Etchandy), A., **XIII**, 630
 Mihailov, A. J., **XIV**, 22
 Mihailov, N., **XV**, 1135
 Mihailov, N. N., **XIII**, 503
 Mihailova, L., **XII**, 908
 Milam, J., **XIII**, 1366; **XIV**, 690
 Milanez, F. R., **XI**, 157; **XV**, 1961
 Milbrath, J. A., **XI**, 346; **XIII**, (101); **XIV**, 1811; **XV**, (597), 1025
 Miles, H. W., **XII**, 915, 934; **XIII**, (463), (1358); **XIV**, 971, (1662); **XV**, 1767
 Miles, M., **XII**, 934; **XIII**, (1358)
 Millar, C. E., **XII**, (736)
 Millard, W. A., **XI**, 773
 Miller, A. C., **XIV**, 1660
 Miller, C. D., **XII**, 704; **XIII**, 269; **XIV**, (1370)
 Miller, D., **XI**, (779)
 Miller, E. J., **XV**, 1466
 Miller, E. V., **XI**, 853; **XIV**, 185
 Miller, H. J., **XIV**, 153, 614, (1662); **XV**, (598)
 Miller, J. C., **XI**, 1221; **XIII**, 262; **XV**, (526), 1224
 Miller, J. H., **XIII**, 218; **XV**, (1185)
 Miller, J. J., **XV**, (758)
 Miller, L. P., **XI**, 677
 Miller, L. W., **XIII**, 828
 Miller, N. C. E., **XI**, (566)
 Miller, P. A., **XIII**, 105
 Miller, P. W., **XIV**, 575; **XV**, (597)
 Miller, R. L., **XI**, 870
 Miller, T. C., **XIV**, 1166, 1379
 Millett, R. S. B., **XIII**, 374
 Milleville, H. P., **XV**, 896
 Millikan, C. R., **XIV**, 674; **XV**, 1117, 1118, 1120, 1711, 1712
 Millington, A. J., **XIV**, 717
 Milliron, H. E., **XI**, 452
 Mills, P. A., **XIII**, 1561
 Milne, G., **XIV**, 1882
 Milne, P. S., **XIII**, 1175
 Milne, R. A., **XI**, (695)
 Milsum, J. N., **XI**, 247; **XII**, 313
 Milthorpe, F. L., **XII**, 773; **XIII**, 856, 1359; **XV**, 624, 1376
 Milton, W. E. J., **XIV**, (19)
 Miner, F. D., **XIV**, (729)
 Minges, P., **XIV**, 1089
 Minges, P. A., **XI**, 1230; **XIII**, 195, (1138), 1332
 Minina, E. G., **XV**, 201
 Ministerio de Agricultura, Madrid, **XV**, (1006)
 Ministries of Agriculture, *see also under countries*
 Ministry of Agriculture, London, **XI**, 1198, 1279; **XII**, (138), 140, (158), (182), 778, (779), (880), 900, 901, 902, 910, 917, (1142); **XIII**, 170; **XIV**, 183, 231, 236, 745, 1167, 2013; **XV**, 698, 1673
 (Ministry of Agriculture, London), **XV**, 136
 Minkevicius, A., **XV**, 1578
 Minnesota Agricultural Experiment Station, **XI**, (1054); **XV**, 1355
 Minnum, E. C., **XI**, 1208; **XII**, 347
 Minshall, W. H., **XII**, 1332
 M'Intosh, T. P., **XII**, 1379
 Mintzer, M. J., **XIV**, 316, 317

AUTHOR INDEX

- Minz, G., XII, 1527; XV, 1207
 Mirchandani, T. J., XI, 573
 Mirzabekjan, R. S., XV, 556
 Missouri Agricultural Experiment Station, XIII, 1095
 Mitchell, A. E., XIV, 1650
 Mitchell, H. K., XIV, 1406
 Mitchell, J. E., XIII, (1283)
 Mitchell, J. H., XIII, 176
 Mitchell, J. W., XI, 5, 343, 1063; XII, 394; XIII, 522; XIV, 229, 1007, 1462, 1464; XV, 581, 661, 665, 671, 870, 1129, (1658)x
 Mitchell, W. K., XI, 240
 Mitchener, A. V., XI, 46
 Mitra, P. K., XV, (758)
 Mittmann-Maier, G., XI, (77); XII, 443; XIV, 1125
 Miyabayashi, T., XIII, 56
 Möbius, M., XII, (3)
 Möckel, W., XII, 784; XIV, 923
 Modlibowska, I., XI, 748; XII, 387, 421, 1455; XV, 472
 Moeller, S., XV, 1100
 Moffatt, J. R., XII, 1201
 Mohammad, A., XII, (609); XIV, 1716
 Möhring, A., XIV, 59
 Möhring, H. K., XII, 713; XIV, 494
 Moinat, A. D., XIII, 699; XIV, 764
 Moir, D. R., XIV, (1476); XV, 1390
 Moissejewa, M., XIV, 768
 de Mol, W. E., XI, 1297
 Molestina, O. E., XIII, (1553)
 Molotkovsky, G. H., XII, 760; XV, 186
 Momot, K. G., XI, 533
 Monašov, G. I., XIV, 81
 Monk, J. W., XIV, 1849
 Monro, H. A. U., XII, 275; XIII, 1572
 Montermoso, J. C., XII, (1195)
 Montes, J. A., XIII, (1553)
 Montgomery, H. B. S., XI, 1163; XII, 118, 1314; XIII, 102, 444, 1268, 1271, 1356; XIV, 1479, 1600, 1643; XV, 557, 1571
 Montgomery, R. H., XI, 942
 Monterin, B. G., XV, 1281
 Montserrat Agricultural Department, Leeward Islands, XI, (1054); XII, (1164)
 Moog, H., XII, 412
 Moon, H. H., XII, 72; XIV, 1536; XV, 1785
 Moore, D. C., XII, 577
 Moore, E. C., XII, 555; XV, 1204, 1880
 Moore, E. L., XIV, 941, 1989; XV, 1312
 (Moore, E. L.), XV, 894
 Moore, H. C., XV, 621
 Moore, H. I., XIII, 1626
 Moore, J. B., XI, 1176
 Moore, J. D., XII, 856, 862; XIII, 819; XIV, 572, 1136; XV, (598)
 Moore, L. A., XII, (295)
 Moore, L. B., XI, 682; XIII, 393; XIV, 980, 1670
 Moore, M. H., XI, 1183; XII, 1334; XIII, 92, 1243, 1268, 1271; XIV, 579, 1601, 1603; XV, 557, 1032, 1652, (1659)d
 Moore, P. W., XIV, 84, 1850
 Moore, R. C., XV, 494
 Moore, R. E., XIII, 1004, 1501
 Moore, R. H., XV, 817
 Moore, W. C., XIV, 1106, 1790
 Moore, W. D., XIII, 214; XIV, 265, 787
 Morada, E. K., XI, 1421
 Morales Giron, J. F., XIV, 1894
 Moreau, R., XIV, 870, (1298); XV, 1063, (1995)f
 Moreira, S., XIII, 543, 544
 Moreland, C. F., XIII, (20)
 Morell, S. A., XII, 700
 Moretti, A., XI, 718
 Moretini, A., XII, (803); XIV, 495
 Morgan, A. F., XI, 296; XII, 289; XIV, 1405
 Morgan, C. N., XIV, 761, 1369; XV, 1161, 1804
 Morgan, E. J., XII, 1448; XIV, 1972
 Morgan, E. T., XII, 151, 1373; XIV, (193)
 Morgan, W. L., XIII, 211, 224
 Morgenroth, E., XIII, 1517
 Morison, G. D., XIV, (200)
 Moroz, E. S., XI, 856; XIV, 839
 Morozov, V. K., XV, 1728, 1731
 Morrill, A. W., Jr., XIII, 486; XIV, 207
 Morris, H. I., XI, 1326
 Morris, J. W., XV, 1798
 Morris, O. M., XII, 813, (826)
 Morris, R. H., XIV, 1987
 Morris, V. H., XI, (441)
 Morrison, B. Y., XIII, 1533
 Morrison, H. E., XV, 1756
 Morrow, E. B., XI, 60; XII, (411); XIII, 1216; XIV, 95; XV, (526)
 Morse, L., XI, 311
 Morse, W. J., XIV, 275
 Morstatt, H., XIV, (1370), 1918
 Mortensen, E., XIII, 1466
 Moscow Committee of Plant Resources attached to the All Union Council of Engineering and Technical Societies, XV, (34)
 Moscow, Institute of Grain Husbandry of the Non-Chernozem Zone, XIV, 1024
 Moser, F., XI, 1496
 Mosher, H. H., XV, (598)
 Moskov, B. S., XII, 745, 1198; XIV, 990, 991, 992, 1120; XV, 156
 Moskovetz, K. G., XIII, 168
 Mosley, F. O., XIII, 511; XV, 1149
 Moss, E. G., XIV, 1699; XV, 635
 Moss, V. D., XV, 511
 Mossop, M. C., XIII, 983
 Mote, D. C., XI, 429; XV, 1756
 Mothes, K., XV, 154
 Mottern, H. H., XI, 302; XIV, 1987; XV, (1336)
 (Mottern, H. H.), XIII, 315
 Motz, F. A., XI, 696; XII, 781
 Moubraj, J. M., XII, 990; XIV, 381
 Moulton, J. E., XII, (765)
 Mounce, I., XIII, 911
 Mowlett, F., XII, (1246)
 Mowry, H., XV, 1975
 Moxon, A. L., XII, 749, (1195)
 Moyer, D. T., XIV, 828
 Moyer, J. C., XI, 1451; XIV, 1416; XV, 2038
 Moyer, L. S., XIII, (697)
 Moyse, W. J., XII, 955; XIII, 912
 Mozhaeva, L. V., XV, (277)
 Mrak, E. M., XI, 308, 1479; XII, 293, 1126, 1128, 1537, 1541; XIII, 1060, 1062, (1067)
 Muggeridge, J., XII, 916; XIV, 182, (665)
 Muguerza, A., XIV, 46, (528)
 Mühle, E., XIV, 117
 Mühlow, J., XIII, 418; XV, 104, 167, 1539
 Muir, R. M., XIII, 480
 Mukerji, B., XIV, 760
 Mulder, X., 219
 Mulder, H. H., XI, 1405
 Mules, M. W., XV, 109
 Mulholland, J. J., XII, 625
 Mullard, S. R., XIV, 778, 1303
 Mullen, A. J., XIV, 1604
 Müller, A. S., XII, 121; XIII, (623)
 Müller, H. P., XV, 165
 Müller, K. O., XII, 924, 1387
 Müller, K. R., XV, 692
 Müller, P., XV, 117, 1650
 Müller, W. H., XIII, (676)
 Müller-Stoll, W. R., XI, 413
 Mullet, Z. A., XV, (758)
 Mullison, W. R., XI, (347)
 Muma, M. H., XIII, 1352; XIV, 1684; XV, 1096, 1609
 Mündel, G., XIII, (706)
 Mundkur, B. B., XIV, 1138
 Munerati, O., XII, (1454)
 Munger, F., XII, (1480); XV, (1232)
 Munger, H. M., XV, (431)
 Munnis, E. N., XIII, 1108
 Munro, J. W., XIII, 430; XIV, 1652
 Munsell, H. E., XIII, 328
 Munsell, R. I., XIII, 855
 Murav'eva, V. I., XIV, 709
 Murnane, C., XIV, 1981
 Murneek, A. E., XI, (380), 1066; XII, 14, 393, 1185; XIII, 53; XIV, 83, 89, 1069, 1785; XV, 496, 722, 878
 Murphy, D. M., XI, 123; XIII, 529
 Murphy, E. F., XII, 703, 1429
 Murphy, L. M., XII, 1266
 Murray, D. B., XII, 205; XV, 1293
 Murray, M. A., XIII, 1108

AUTHOR INDEX

- Murray, P. W., XIII, 277
Murray, R. K. S., XI, 580; XIII, 1020
Murray, S. S., XIV, 1215
Murrill, W. A., XV, 1500
Musgrave, C. T., XI, 1096
Musket, A. E., XI, 1232; XII, 1391; XIII, 476, 881; XIV, 627, 628
Mustafa, A. M., XI, 945; XII, 876; XIII, 1298; XIV, 478; XV, 352
Mustafa, Z., XIII, (656)
Mustard, M. J., XV, 1977
Mutinelli, A., XIV, (365), 887
Myers, A., XIII, 509; XIV, 239
Myers, C. E., XIII, 1415; XIV, 1256
Myers, C. H., XV, (758)
Myers, R. M., XI, (347)
Mynbavey, K., XII, 1064; XIII, 1380
Mysore, XII, (337)
Nadel, M., XII, 1176; XV, 1206
Nadkarni, M. D., XV, 360
Nagasawa, K., XI, 47
Nagel, C. M., XV, (598)
Naghschi, J., XIV, 2001
Nahapetjan, A. A., XIII, 1389
Nahapetjan, L. K., XIII, 1389
Naik, K. C., XII, 646; XIV, 836
Nakamura, M., XI, 1307
Nakayama, K., XI, 1307
Nambiar, K. K. K., XII, 657
Nanjoshi, A. N., XIII, 1579
Nandi, H. K., XIV, 1822
Nanji, H. R., XV, (2059)
Nanking University, XII, 201
Narasimharao, M. P., XI, 1082
Narasimhaswamy, R. L., XI, 926
Narayana, N., XIV, 894
Narodny, L. H., XV, 1945
Nash, L. B., XII, 1377; XIII, 644
Nasharty, A. H., XV, 484
Nath, B. V., XIV, (412)
Nathanael, W. R. N., XII, 249; XIII, 603; XIV, 1351; XV, 2058
National Agricultural Research Bureau, Chung-king, XII, 325
National Arborist Association, XIV, 1543
National Fertilizer Association, XI, 1015
National Institute of Agricultural Botany, Cambridge, XI, 454, (488); XII, 1150, 1351; XIV, 1445
National Institute of Agricultural Engineering, XV, 32, 382, 2067
National Research Council of Canada, XIII, 339; XIV, (968), (1455), 2019; XV, 926
National Research Council, U.S.A. Committee on Apparatus in Aerobiology, XI, 663
National Shade Tree Conference, XIV, 1543
Natividade, J. V., XII, 1169, 1207; XIV, 1062, (1063); XV, 992
Natrass, R. M., XII, 607, 932; XIII, (429), 882; XIV, 1685; XV, 547
Naude, C. P., XI, (872); XIV, 754
Naude, T. J., XIII, 977, (982)
Naundorf, G., XII, 343, 1393
Navarro de Andrada, E., XI, 1345
Navashin, M. S., XII, 1414
Nayar, M. R., XIII, (1138)
Naylor, A. W., XI, 1215
Naylor, F. L., XII, (18)
Nazarov, A. A., XIV, 736
Neal, A. L., XV, 1466
Neal, J. H., XII, 37
Neal, W. M., XI, 1504
Nearing, G. G., XV, 232
Neary, M. E., XIV, 588; XV, (1071)
Neaverson, C. V., XV, 1477
Nebraska Agricultural Experiment Station, XII, (337); XIII, 1096; XV, (2082)b
Necaeva, N. T., XIV, 1910
Nechaev, I., XII, (1195)
van Nederveen, G., XII, (1095)
Neergaard, P., XIII, 425; XIV, 1108
Neethling, J. H., XIII, 455
Neff, M. S., XII, 1111
Neill, J. C., XV, 255
Neiman, G. B., XII, 1065, 1066
Neiswander, C. R., XI, (441)
Nejman, G. B., XIII, 1382
Nel, R. I., XI, 82; XII, 457; XIV, 1158, (1184); XV, (128)
Neller, J. R., XV, (505)
Nelly, J. D., XIV, 1191
Nelson, C. H., XIV, 1690
Nelson, E. K., XIV, 928; XV, 149
Nelson, H. D., XIII, (562); XIV, (858), 1843, 1844
Nelson, N. T., XII, 189
Nelson, O. A., XI, (380)
Nelson, R., XIII, 955; XV, 1782
Nelson, R. C., XI, 264; XII, 967, 1184; XIII, 309; XIV, 445
Nelson, R. H., XII, (200)
Nesbitt, L. L., XIV, 1208; XV, (1852)z
Netherlands, *see* Dutch
Neuberger, A., XIV, 190
Neubert, A. M., XI, 302; XIV, 1047, 1410, 1946, 1982, 1986, (2003)
Neuhauss, —, XII, 575
Neuman, G. B., XIV, 719
Nevin, C. S., XV, (1336)
Newbound, K. B., XI, 1080
Newcombe, B., XIV, 1980; XV, 2032
Newcombe, H. B., XII, (367)
Newcomer, E. H., XI, (1067), (1137); XIV, (755); XV, 1403
Newcomer, E. J., XIII, 1287; XIV, 604
Newell, J., XI, 1076, 1508; XV, 1089, 1091, 1092, 1093, 1095
New Guinea Department of Agriculture, XI, (1526)
Newhall, A. G., XI, 28; XII, 958; XIII, 217, (512), 1399; XIV, 1265; XV, 741
New Hampshire Agricultural Experiment Station, XII, 1578
New Jersey Agricultural Experiment Station, XIII, 66; XIV, 2026; XV, (2082)c
Newmark, M., XIV, 1432
New South Wales, Biological Branch, Division of Science Services, XI, 1437; XII, 563; XIII, (219), 1394
New South Wales, Department of Agriculture, XIII, 1039
New South Wales Field Officers, Division of Plant Industry, XII, 360
Newton, J. H., XIII, 99
Newton, W., XIV, 824; XV, (1336)
New York State Agricultural Experiment Station, XI, 1039; XII, 866; XIII, 438; XV, 939
New York State Horticultural Society, XIII, 1097; XV, 1356
New Zealand Department of Agriculture, XI, 30, (1012); XII, 329; XIII, 1188; XV, 383, 433, (2082)d
New Zealand, D.S.I.R., *see* Department
Nichiporovich, *see* Ničiporovič
Nicholas, D. J. D., XIV, 1771; XV, 1383, 1553, (1853)a
Nichols, M. L., XIV, 1010
Nichols, P. F., XI, 308; XIII, 1058
Nichols, R. F. W., XIV, 1887
(Nicholson, D. J.), XIV, 1820
Nicholson, H. H., XII, 1565
Nicholson, R. I., XII, 215
Nicholson, V. H., XIV, (1545)
Ničiporovič, A. A., XII, 1179; XV, 184, (227), 1140, 1749
Nickels, C. B., XIII, 1288; XV, (1071)
Nicodemus, Z., XI, 551
Nicol, H., XII, 737; XIII, 660
Nicol, J., XV, 1263
Nicol, J. M., XI, 932
Nicolaisen, N., XII, 489, 1428; XV, 691
Nicolaisen, W., XIII, 899
Niederhauser, J. S., XIV, 228
van Niekerk, P. E. le R., XV, 63
van Niekerk, O. T., XI, 523
Nielsen, J. P., XV, (1336)
Nielsen, L. W., XIV, 1179
Nielsen, N., XIV, 446
Niethammer, A., XII, 349, 1449; XIII, 857
Nieuwpoort, D., XI, 1412
Nigeria Department of Agriculture, XIV, 421; XV, 384, 940, 1357
Nigeria Oil Palm Research Station, XIII, 666
Nightingale, G. T., XII, 1517; XIII, 620, 1182
Nijhawan, S. D., XV, 401, (1406)i

AUTHOR INDEX

- Nijholt, J. A., XII, (273)
 Nikitin, A. A., XV, (598)
 Nilsson, A., XIII, 492; XV, (526)
 Nilsson, E., XIII, 340
 Nilsson, F., XII, 794; XIII, 707;
 XIV, 460; XV, 447, 448, 512,
 (526)
 Nilsson, G., XIV, 524, 1017; XV,
 987
 Nilsson-Ehle, H., XIII, 718; XV,
 449
 Nilsson-Leissner, G., XII, 1563
 Nishimura, M. S., XV, 664
 Nisikado, Y., XI, 1168
 Nissley, C. H., XIII, (1573);
 XIV, 1667
 Nixon, R. W., XII, 1492; XIII,
 1496
 Noack, K., XIV, (759)
 Noble, I., XII, (288)
 Noble, N. S., XV, (128)
 Nobrega, N. R., XI, 798
 Noda, L., XII, (587)
 Noel, W. A., XII, 1122
 Noggle, G. R., XIII, 952
 Noguera, J. R., XIV, 640
 Nolde, I., XIV, 1333
 Noll, A., XIII, 823
 Noll, J., XII, (982)
 Nolte, A. J., XI, 298, 300
 Nolte, M. C. A., XI, (1178); XII,
 (235)
 Norbury, C. P., XV, (1006)
 Norburn, A. G., XIV, 201
 Norris, D. O., XI, 797, 1227;
 XIII, (1358), 1432; XIV, 287,
 1205; XV, 1060
 Norris, K. R., XIV, 662
 Northam, J. I., XI, (1092)
 North Carolina Agricultural Ex-
 periment Station, XV, 1358
 North-Coombes, A., XII, 654
 North-Eastern States, U.S.A.,
 XI, 43
 Northern, H. T., XII, (765);
 XIII, (690)
 Northern Ireland, Hillsborough
 Agricultural Research Insti-
 tute, *see* Hillsborough
 Northern Nut Growers Associa-
 tion, XI, 1040
 Northern Rhodesia Department
 of Agriculture, XII, (1584);
 XIV, (2030)
 Norton, C. E., XI, 307
 Norton, L. B., XII, (462)
 Nosti, J., XV, 271, 848
 Nostitz, A. V., XV, (432)
 Notley, V. E., XI, 1483; XII,
 685; XIII, 491
 Nott, G. A., XV, (1336)
 Nottingham, J. O., XII, 157
 Nottini, G., XV, 585
 Novikov, G. N., XV, 400
 Novikov, V. A., XV, 1850
 (Nunnick, F. C.), XV, 927
 Nutman, F. J., XI, 560
 Nutman, P. S., XV, 967
 Nyasaland Department of Agri-
 culture, XI, 1041, (1054),
 1519; XIII, (347); XIV, (426),
 1446; XV, (1366), 2076
 Nyhlén, A., XV, 129
 Nylund, R. E., XV, 320, 876
 Nyquist, J., XIV, 1040
 Oberholzer, P. C. J., XI, 1314;
 XV, 780
 Oberle, G. D., XV, 593
 O'Brien, T. E. H., XII, 634, 1049,
 1059; XIV, 1357
 O'Byrne, F. M., XI, 859
 Occhioni, P., XV, 819
 Ocfemia, G. O., XI, (1365); XII,
 243
 O'Connor, B. A., XI, 233, 234,
 236, 1430
 O'Connor, R. T., XII, 26, 27
 Oderkirk, G. C., XIV, 612
 Odinzova, E. N., XV, (34)
 Odland, M. L., XIII, 1341,
 (1391); XIV, 238
 Odland, T. E., XIII, 459
 Oehlkers, F., XIII, 851
 Oertel, A. C., XIII, (1138)
 Oesterling, M. J., XIV, (2003)
 Oexemann, S. W., XII, 357
 Offermann, A. M., XIV, 687
 Officers of the Fruit Branch,
 Queensland, XI, 1099, 1153,
 1436
 Offord, H. R., XV, 511
 Ogarrin, A. I., XV, 910
 Ogden, C. K., XIII, 1623
 Ogden, W. B., XII, 531, (532)
 Ogg, W. G., XII, 365
 Ogier, T. L., XII, 819; XIII, 395
 Ogilvie, L., XI, 787, 805, 1210;
 XII, 912, 964; XIII, 858, 860;
 XIV, 1749; XV, 92, 549, 609,
 1695, 1826
 Ohio Agricultural Experiment
 Station, XI, (1054)
 Oinoue, Y., XI, 63, 64
 O'Kane, W. C., XI, (1192); XIII,
 126
 Oklahoma Agricultural Experi-
 ment Station, XV, (946)
 Oldham, C. H., XII, 166; XIII,
 409; XV, 1503
 Oliphant, J. N., XIII, 1505
 Olive, L. S., XV, 1839
 de Oliveira, A. C., XIV, 1693
 d'Oliveira, B., XIII, 1237
 d'Oliveira, M. de L., XII, (982);
 XIII, 1120, 1267; XIV, 1254
 Oliveras Massó, C., XV, 1642
 Olivo, G. D., XV, (1406)f
 Olliver, M., XI, 1000, 1002, 1497;
 XIII, 636
 Ollivier, A. V., XIII, 550, 769
 Olmo, H. P., XII, (1279); XIII,
 (1177), 1222, (1227); XIV,
 108, 1561; XV, 440
 Olney, A. J., XII, 1256
 Olonichenko, A. I., XIII, 1150
 Olsen, S. R., XIII, (702)
 Olson, E., XV, 224
 Olson, L. C., XI, 461; XII, (39)
 Olson, O. E., XII, 749, (1195)
 Oman, D. E., XIII, 1566
 O'Neil, J. B., XI, (380)
 O'Neill, W. J., XIII, 764, 830,
 1244
 Ontario, Department of Agricul-
 ture, XIII, 670
 Oosthuizen, E. A., XIV, 1867
 Oosthuizen, M. J., XIV, 1188
 Opfer-Schaum, R., XV, (1853)b
 Opitz, K., XIV, (200)
 Oppenheim, J. D., XV, 1869
 Oppenheimer, H. R., XI, 513,
 842; XII, 1173, 1464, (1496);
 XV, 789
 Oraman, N., XI, 411
 Orbeli, L. A., XIV, 973
 Orchard, O. B., XIII, 1444
 Oregon State Horticultural
 Society, XV, 941
 O'Reilly, H. J., XIV, 1376
 Organ, J. G., XIII, 331; XIV, 407
 Orissa, XII, (1164), 1579
 Orman, A. C., XII, 183
 O'Rourke, F. L., XIII, 73, 1210;
 XV, 1400
 Orozco, C., J. M., XII, 631
 Orr, J. B., XII, 1167
 Ortega Nieto, J. M., XV, 1478
 Orth, H., XII, 924
 Orton, C. R., XIII, 346, 1637
 Osborn, B., XIII, 1114
 Osborn, E. M., XIV, 1129
 Osborn, R. A., XIII, 1585, 1589
 Osburn, M. R., XV, 1214, (1232),
 1898
 Oserkowsky, J., XI, 344; XIII,
 (367)
 Osipov, V. S., XIV, 170
 Osmond, D. A., XI, 722; XIII,
 887; XV, (1006), 1394, 1395
 Osnickaja, E., XV, 1098
 Ossianilsson, F., XIII, (1358);
 XIV, 1151
 Ossowski, L. L., XIV, (635)
 Ostapenko, L. A., XV, 1386,
 1387, 1388, 1389
 Ostendorf, F. W., XII, 1052, 1513
 Osterwalder, A., XI, 1107; XII,
 1119; XIII, 91, 118, 808;
 XIV, 557; XV, 90, 555, 1574,
 2041, (2059)w
 Östlund, N., XIV, 497; XV, 466,
 1999
 Otanes, F. Q., XII, 242
 Otis, L., XI, (1506)
 Ott, A. C., XIV, (1298)
 Ott, M., XII, (1536)
 Ou, S. H., XV, (598)
 Ovščinnikov, B. N., XV, 172
 Ovščinnikov, N. N., XII, (1195)
 van Overbeek, J., XI, (347);
 XIII, (219); XIV, (1803);
 XV, 1235, (1406)f, 1441
 Overholser, E. L., XII, 65, 754,
 787, 809, 813, 1101, 1248;
 XIII, 65, 1160, 1183, 1200;
 XIV, 62, 1481, 1506, 1510;
 XV, 485, 504, 1634
 Overley, F. L., XII, 65, 809, 813,
 1248; XIII, 762, 891, 1200,
 1244; XIV, 1481; XV, 504,
 1634
 Overstreet, R., XII, (752)
 Owen, E. C., XV, 1178
 Owen, F. V., XI, 103, 1234
 Owen, O., XIII, 1340

AUTHOR INDEX

- Owen, R. C., XI, 838; XII, 1002; XIV, 1417
- Owens, C. E., XI, (1174); XIV, (635)
- Owens, H. B., XIV, (1803)
- Owtschinnikov, *see* Ovščinnikov
- Oyler, E., XII, 1439
- P., T. V., XV, 1250
- Pacheco Gerrarte, M., XIV, 890
- Paddock, M. E., XV, (432)
- Paddock, E. F., XIV, (1370)
- Padfield, C. A. S., XI, 729
- Padilla, J. E., XI, (1441)
- Padlick, M. E., XIV, (230)
- Padwick, G. W., XI, 1445; XIII, 583
- Paech, K., XII, (1536)
- Pagán, V., XV, 1919
- Pagden, H. T., XII, 606
- Page, F., XII, 68
- Page, G. N., XII, 552
- Painter, E. P., XIV, 1208
- Painter, J. H., XI, (900); XIII, 1493; XIV, 323
- Painter, R. H., XIV, (161)
- Pais, S., XIII, 1515
- Paixão, J. da C., XIV, 1694
- Paker, M., XIV, 1327
- Pal, B. P., XIV, (673); XV, 619, 1121
- Palaweew, T., XIV, (1030)
- Paleni, A., XII, 1547
- Palestine Department of Agriculture, XII, 1157; XIV, 422, (426), (2030); XV, 942
- Paliatseas, P., XIV, (1184)
- Palienko, T. S., XIV, (691)
- Palm, C. E., XII, (1347)
- Palma, M., XIV, 1896
- Palmer, D. F., XI, 169; XIV, 1338
- Palmer, E. F., XIII, 726; XIV, 1076
- (Palmer, E. F.), XV, 1417, 1420, 1421
- Palmer, R. C., XI, 732; XII, 660; XIII, 734, 1259; XIV, 511, 1590
- Palmgård, E., XV, 1428
- Palmiter, D. H., XII, 852; XIII, 1277, 1318; XIV, 72, 154, (547), 1123, 1137; XV, (598), (599), 1053
- Palti, J., XIV, 1142, 1267; XV, 1100
- Panditsekere, D. G., XIV, 401; XV, 2057
- Pangola, K. I., XV, 200
- Pankhurst, J. B., XV, 668
- Panosjan, A. K., XV, 479
- Panse, E., XIV, (641)
- Papadakis, J. S., XI, 690
- Pape, H., XII, (200), 1458; XIV, 781
- Parbery, N. H., XIII, 64
- Pardo, M., XV, 1714
- Pardy, A. A., XIII, 1541
- Pardy, M. H., XIII, 188; XIV, 1258
- Parham, B. E. V., XII, 605
- Parhomenko, M. P., XII, 762
- Parisinos, C. C., XIV, (1932)
- Park, J. B., XII, (982)
- Park, M., XI, 191, 916
- Parker, E. R., XII, 214, 585, 1466; XIII, 247, 1464, 1475; XIV, 302, 1872; XV, 786, 1204, 1220, (1406)a
- Parker, M. D., XII, (229)
- Parker, M. M., XIV, 261
- Parker, M. W., XI, 487, 1070; XII, (1454); XIII, (1454); XIV, 227
- Parker, R. L., XIII, 1296
- Parker-Rhodes, A. F., XII, (894), (1347); XIII, (123), (1329); XIV, (635)
- Parkin, E. A., XII, 886; XIV, (161)
- Parkinson, T. L., XIII, 1581
- Parks, R. Q., XIV, 996, 1272, 1770
- Parodi, L. R., XII, 731; XIV, (19)
- Parr, W. J., XI, 509; XIII, 1346
- Parris, G. K., XI, 796; XII, 244, 266; XIII, 265
- Parrott, P. J., XI, 697
- Parache, E., XII, (367)
- Parsons, T. H., XII, 280; XIII, (576)
- Partridge, N. L., XII, 402, 771, 814; XIII, 755, 807; XV, 1549
- Pascual, A., XII, 93, 1283
- Passfield, G., XIII, 224
- Passecker, F., XI, 394, 398; XII, 376, 389; XIV, 1505; XV, 471
- Passy, P., XIII, 88
- Pastoriza, R., XIII, (770); XIV, 909, 1381
- Patch, E. M., XII, 449
- Patel, B. S., XIV, 901
- Patel, C. B., XIII, (1620); XIV, 888
- Patel, J. S., XIII, (1553)
- Patel, K. R., XIV, 901
- Patenšev, S. P., XIV, 27
- Paterson, D. D., XII, 1498
- Patry, L. M., XIV, (1671)
- Pattabhiraman, T. V., XIV, 1346
- Patterson, N. A., XI, 1200
- Paul, E. B., XIV, (412)
- Paul, W. R. C., XI, 191, 1394; XII, 248; XIII, 604; XV, 1952
- Paulsen, E. F., XV, 642
- Paver, H., XIV, 724; XV, 680
- Pavlova, E. A., XIV, 1266
- Pavlovskii, E. N., XV, 356
- Pavlychenko, T. K., XIII, 834
- Pavski, V. A., XIV, 51
- Pawley, W. H., XIV, 1456
- Payne, J. H., XII, 303
- Pčelkin, V., XV, 1111
- Peacock, S. M., XV, 659
- Pearce, G. W., XI, 1199; XII, (462), 1345; XIII, 514, 1325; XIV, 1615
- Pearl, R. T., XI, (488)
- Pearse, H. L., XIII, 780; XV, 71, 72, 536, 873
- Pearse, S. C., XIII, 1142, 1204
- Pearse, V. A., XII, 1122
- Pearson, A., XII, 469
- Peck, E. F., XII, 867
- Pedersen, M. W., XIII, (267)
- Pederson, C. S., XI, 621, 991; XIII, 652, 1077; XIV, 1988, (2003); XV, 127
- (Pedro Marotta, F.), XV, 949
- Peckh, M., XI, (689), (1315); XIII, 1182
- Peglion, V., XII, 1308
- Peile, R. M., XIII, (1087); XIV, (1431)
- Peiris, J. W. L., XV, 1824
- Penders, J. M. A., XI, 1431
- Pendse, G. S., XV, 1653
- Peninsula Horticultural Society, XV, 1359
- Penman, F., XI, 65
- Penman, H. L., XI, (1073)
- Penney, M., XV, (1336)
- Pennington, C. E., XII, 733
- Pennsylvania Agricultural Experiment Station, XI, (1054); XII, 719; XIII, 345; XIV, 963; XV, 385
- Penny, J. S., XIV, 818
- Pentzer, D. J., XI, 307; XIV, 1429; XV, 905
- Pentzer, W. T., XI, 736, 1140; XII, 670; XIV, 1944, 1955
- Penzhorn, K. E. W., XII, 83
- Pepkowitz, L. P., XIV, 410, 921, 1012; XV, 402, 883, (1336)
- Pepper, B. B., XII, 1420; XIII, (463), 1443; XIV, 1677, 1682
- Percival, G. P., XIV, 1521, 1573
- Percival, J., XII, 1566
- Periera, H. C., XI, 458
- Perelló Barcelo, J. M., XV, 1722, 1740, 2055
- Peresvetov, A. S., XV, 1518
- Perez-Llano, G. A., XIV, (458)
- Perkins, M. S., XIII, (1067)
- Perlberger, J., XII, (1318); XIV, 1142; XV, 1029
- Perlmutter, F., XIII, 76
- Perold, I. S., XIII, 1337
- Peronne, —, XV, 336
- Perrault, C., XIII, (231)
- Perron, J. P., XIV, (1298)
- Peronne, —, XV, (2059)x
- Peronne, P., XV, 1077
- Perry, J. C., XIV, 1322
- Persing, C. A., XIV, 1326
- Persing, C. O., XI, 528, 1329; XII, 564; XIII, 259, 555, 975; XV, 800, 1204, 1215
- Person, L. H., XV, (758)
- Persson, G. R., XV, 1641
- Pervuhina, N. V., XIV, 1725; XV, 6
- Pescott, R. T. M., XI, 80
- Petch, C. E., XI, 735; XV, 590, 591
- Petersen, A., XII, 96
- Petersen, L. H., XV, 582
- Peterson, A. W., XIII, 1205
- Peterson, G. T., XV, 1322
- Peterson, H. B., XV, 716
- Peterson, W. H., XV, (1071)
- Peterson, W. J., XI, 1492

AUTHOR INDEX

- Petherbridge, F. R., XIII, 183; XIV, 726, 727; XV, (758)
- Petit, R., XIII, 965
- Petrie, A. H. K., XI, 498; XIII, 691; XV, 637
- Petrov, E. G., XIII, 775
- Pett, L. B., XIII, 320
- Pettigrove, H. R., XV, 1831
- Pettit, A. M., XIV, 1287
- Peyer, E., XII, 1546; XIII, 1221, 1226, 1241; XIV, 1099, (2003); XV, 80, 358, 1522, 1557, 1560, 1639, (2059)y, (2059)z
- Pfaff, A., XV, 2015
- Pfältzer, A., XI, 920
- Pfeiffer, N. E., XIV, 1911
- Pfeil, E., XIV, (458)
- Pfund, M. C., XIV, 1042
- Phaff, H. J., XIII, 1060; XIV, (2003)
- Phalnikar, N. L., XV, 1653
- Pheteplace, W. D., Jr., XIV, (412)
- Philippi, E., XI, 391
- Phillips, D., XI, 1367
- Phillips, A. D., XII, 1048
- Phillips, A. H., XI, 321; XIV, 415
- Phillips, A. M., XV, (1658)s
- Phillips, G. L., XIV, 859
- Phillips, H. J., XV, 714
- Phillips, J. H. H., XII, (982); XIII, 889
- Phillips, J. S., XI, 593
- Phillips, R., XIII, 917
- Phillips, W. R., XI, 970; XIII, 624, 1558
- Phillis, E., XI, 27, 675
- Philosophova, T. P., XII, (1274)
- Philp, G. L., XII, 60
- Philpott, M. W., XI, 1413
- Phipps, R. F., XV, (1071)
- Phipps, I. F., XV, (34)
- Pickel, D. B. J., XV, 1922
- Picker, W. E., XIV, 1321
- Pickett, A. D., XIV, 532, 588; XV, (1071)
- Pickett, B. S., XI, 1058; XII, (1246), 1287, 1288, 1494; XIV, 1089, (1803)
- Pickett, W. F., XI, (779)
- Pickford, P. T. H., XI, 999; XII, 928, 959; XIII, 872, 914, 919; XIV, 1734, 1745; XV, 1481, 1677, 1776
- Pickles, A., XII, 218, 247, 1503; XIII, 271, 272; XV, 1275
- Piadaflu, A., XIV, 1081; XV, 1899
- Rieniazek, S. A., XIV, 63, 1509, 1542, 1649, 1651
- Pierce, E. C., XIII, (690), 923
- Pierce, K. W., XV, 1800
- Pierce, W. C., XV, (1071)
- Pierres, R. B., XIV, 835
- Pieris, W. V. D., XII, 262
- Pierre, W. H., XIII, (1182)
- Pietsch, A., XII, 943
- Pigulevskaya, N. N., XIII, (219)
- Pijoan, M., XV, 326
- Pike, K. A., XI, 1231
- Pilcher, R. W., XI, 623; XV, 1329
- Pilin, G. M., XII, 87
- Pillai, S. C., XI, 673; XII, 743
- Pillay, K. S., XII, 642
- Pillsbury, A. F., XIII, 1477; XIV, 1321
- Pinckard, J. A., XI, 130; XIII, 30; XV, (598)
- Pinkus, R., XV, 1955
- Pinto da Silva, A. R., XIV, 984
- Piper, C. S., XI, 369, 1272; XII, 750; XIV, 1029, 1687, 2008
- Pirie, N. W., XII, 676, 1550
- Piristi, M., XV, (1853)b
- Pirone, P. P., XI, 1081; XIII, 337, 790; XIV, (1816); XV, (245)
- Pirovano, A., XIV, (543)
- Piza, S. de T., XV, (865)
- Pizer, N. H., XII, 38; XIII, 1452; XIV, 1789; XV, 1169
- Plagge, H. H., XII, 1520; XIV, 369
- Plakida, E. K., XI, 1141
- Plakidas, A. G., XI, 760; XIII, (101); XIV, (1816)
- Plank, H. K., XI, 246; XV, 1238
- van der Plank, J. E., XI, 257, 266, 267, 269, 270, 271, 272, 273, 274, (291), 523, 524, 525; XIV, 1188, 1204, 1701; XV, 141, 1107
- Plank, R., XIII, 300; XIV, 1386
- Plant, W., XII, 913, (929); XIII, 873; XV, 1383
- "Planter", XIV, 880
- Platenius, H., XI, 280, 1240; XII, (1112); XIV, 913; XV, 880
- Platzmann, M., XI, (101)
- du Plessis, C., XI, (1178)
- du Plessis, S. J., XI, 426, 756; XII, 447; XIV, 1143, (1184); XV, 119, 318, 319, 566
- Plinka, A. D., XIV, 740
- Plitt, T. M., XI, 667
- Plock, H., XII, 1232; XIII, 740
- Plummer, B. E., XIV, (1545)
- Plummer, C. C., XII, (235); XIV, 1849, 1886
- Pösch, E., XIV, 568
- Podešva, J., XII, 344; XIV, 1535
- Podluzhnyi, D. F., see Pollužnyi
- Poe, C. F., XII, 294; XV, 1320
- van der Poel, J., XI, 553
- de Poerck, R., XIV, (1476)
- Poggendorff, W. H., XI, 1233; XV, 1733
- Pokorny, F. J., XIV, 1235
- van de Pol, P. H., XV, 559
- Poland, G. L., XI, 242
- Polansky, T. S., XII, (708)
- Polgár, A., XI, 1248
- Polhamus, L. G., XV, 1128
- Pol, C., XV, 1514
- Polishtshouk, A. D., XI, 715
- Poljakov, N. K., XII, 1264
- Pollard, A., XI, 989, 993; XII, 949, 1116, 1117; XIII, 322, 1079, (1087), 1584; XIV, 1969; XV, 327, 1706, 1813, 2024
- Pollard, A. G., XIII, 853, 1134
- Pollard, H. N., XIII, 432
- Pollard, L. H., XV, 716
- Pollard, N., XI, 341
- Pollužnyi, D. F., XI, 1340
- Polovenko, I., XII, 1060
- Polunin, N., XIII, 868, 1105
- Pomerleau, R., XIV, 1579
- Pomeroy, C. S., XIII, 548, 1465, 1469; XIV, 1833
- Ponce de León, E., XIII, 1508
- Pont, J. W., XIV, 1188
- Ponting, J., XI, (1506)
- Pontis, R. E., XIII, (109); XV, 1791
- Pontis Videla, R. E., XIV, 585
- Pontović, V. E., XV, 656
- Pontovich, W. E., XV, 1, 189
- Poole, C. F., XV, 694, 888
- Popenoe, W., XI, 168, 587, 599, 1401; XII, 655, 1017, 1482; XIII, (1553); XV, 1222
- Poplavskij, K. M., XIII, 730
- Popoff, P., XIV, 696
- Popov, G. I., XV, 1751
- Popov, I. P., XV, 1681
- Popp, H. W., XI, (681)
- Porte, W. S., XIII, 213
- Porter, A. M., XIII, 1341, (1391); XIV, 238
- Porter, D. R., XI, 409, 470
- Porter, R. H., XIII, (139); XIV, 180; XV, 110, 416, 606
- Porter, R. P., XIV, (547)
- Porter, S. A., XII, 696
- Porter, T., XI, 121, 1498
- Portheim, L., XI, 342
- Porto, H., XV, 855
- Poschenrieder, H., XIV, 281
- Poskin, J. H., XV, 283
- Posnette, A. F., XI, 931; XII, 630; XIII, 281, 283, 1522, 1524, 1525; XIV, 1349, 1896, 1898, 1899, 2021; XV, 1264
- Post, K., XI, (380), 824; XII, 547; XIV, 1301, 1808
- Potapenko, A. I., XV, 962, (1406)g
- Potapenko, J. I., XIII, 783
- Potgieter, J. T., XV, 570
- Potter, C., XI, 776; XII, (1347); XIV, (161), 623
- Potter, G. F., XII, 228, 1215, 1489; XIV, 323; XV, 805
- Potter, J. M. S., XII, 69, 845, 1257; XIII, 36
- Potter, M. C., XII, 1298
- Potts, S. F., XII, (462)
- Potts, W. F., XV, (1658)t
- Pound, F. J., XI, (965), 1362; XII, 629; XIII, 1523, 1527; XIV, 13, 327, 1341; XV, 1271, 1272, 1273, 1283
- Pound, G. S., XV, (1853)k
- Poutasse, E. F., XI, 1267
- Powell, A., XI, 968
- Powell, A. A., XIII, 633; XIV, 917
- Powell, D., XII, 1325; XIV, 1611
- Powell, H. R., XI, 733; XII, 572; XV, 98
- Powers, L., XI, 1134; XV, 662, 663, 1013, 1163
- Powers, W. L., XII, 28; XV, 509, 1495

AUTHOR INDEX

- Powning, R. F., XIV, 158; XV, (1658)u
- Prater, A. N., XIV, 1420
- Pratt, B. G., XI, (1192)
- Pratt, H. K., XIV, 1949
- Pratt, R., XIV, 1717
- Pravdin, F. N., XV, 674
- Pravdin, L. F., XIV, 838, 1297; XV, 231, 461
- Du Preez, D., XIV, 1188, 1373, 1374, 1375; XV, 47, 269, 867
- Prentice, I. W., XIII, 189, 954
- Prescott, J. A., XIV, (19); XV, 660
- Presley, J. T., XV, 953
- Prest, R. L., XI, 1250; XII, 1014; XIV, 865
- Preston, A. P., XV, 1396
- Preston, C., XI, (380), (1092)
- Preston, N. C., XII, 165; XIII, 460; XIV, 758
- Preston, N. D., XIV, (1030)
- Preston, R. D., XIII, 884
- Preston, R. J., Jr., XIII, (697)
- Pretorious, W. J., XI, 33, 698
- Price, W. C., XIII, 1367; XV, (431)
- Pridham, A. M. S., XIII, 11
- Priebus, K., XII, (520); XIV, 1248
- Priem, A., XV, (2060)d
- Priestley, J. H., XIV, (19)
- Prill, E. A., XV, (1658)v
- Prince, A. L., XII, 30; XIII, 394; XV, 413
- Prinsloo, A. L., XI, 33, 698, 1301
- Probst, A. H., XIV, 277, 1286
- Proctor, C. H., XV, 93, 176
- Proebsting, E. L., XII, 448; XIII, 753, 1201; XIV, 120, 1511
- Proefstation Midden-en Oost-Java, XII, (641)
- Proefstations der Centrale Proefstations Vereeniging (Java), XII, 1512
- Prögler, R., XII, 1549
- Prokofiev, A. A., XV, 1, 185, 188, 1138, 1139
- Protzman, C. M., XV, 1241
- Provan, J. L., XI, 41; XII, 46; XV, 1201
- Prozorovskii, A. V., XV, 55
- Prunster, R. W., XI, 88
- Pruthi, H. S., XII, 613, (1095); XV, 275
- Pryor, D. E., XI, 109; XIV, 1259; XV, 701
- Pryor, R. L., XIV, (297)
- Psarev, G. M., XII, 1444
- Pubols, B. H., XIII, 161
- Pucher, G. W., XI, 1084
- Puerto Rico Agricultural Experiment Station, XI, 1520; XII, 330; XIV, 423; XV, 386, (2082)e
- Puffer, M. E., XIII, 323
- Pugsley, A. T., XII, 1380
- Punjab Fruit Journal, XII, 1071; XIII, 1591; XIV, 1956
- Purseglove, J. W., XIV, 362
- Pushkarskij, S. D., XIII, 741
- Putt, E. D., XI, (496); XIII, (947); XV, (1185)
- Puttemans, A., XII, (110)
- Putterill, V. A., XII, 88
- Pyenson, L., XIII, 605, 1305
- Pyke, E. E., XI, 1404
- Pyke, M., XI, 444, 1502; XII, 1134, 1282, 1451; XIII, 236, 637
- Pyke, M. A., XI, 1003
- Pyke, W. E., XV, 340, 353
- Quarrell, C. P., XII, 1354
- Quastel, J. H., XIV, 1203; XV, 967
- Quayle, H. J., XIII, 258; XIV, 621; XV, 586
- Quayle, W. L., XV, (1852)f
- Queensland Acclimatisation Society, XI, 1521; XII, 1580; XIV, 964; XV, 387
- Queensland Department of Agriculture and Stock, XI, 1042; XIV, 1447
- Queensland, Director of Plant Industry, XII, 331
- Queensland, Officers of the Fruit Branch, XI, 1099, 1153, 1436
- Quick, C. R., XV, 511
- Quinn, N. R., XI, 115
- Rabak, F., XIV, 209, 693; XV, 158
- Radeloff, H., XI, 491
- Rader, L. F., Jr., XV, 206
- Rafinesque, C. S., XV, 27
- Raggio, J. L., XV, (432)
- Ragonesse, A. E., XIII, (706)
- Rahman, K. A., XI, (248), 1180; XII, 450, (659); XV, 1038, 1147, 1237, 1894
- Rahmlow, H. J., XIV, 1453
- Rahn, E. M., XI, 118; XIII, 1334, 1421
- Rainio, A. J., XIII, (947)
- Rajan, M. R. D., XV, 1208
- Rakitin, J. V., XII, (765); XIV, 910, (1030)
- Raleigh, G. J., XII, 159; XIII, 1395; XIV, 762; XV, 684
- Raleigh, S. M., XV, 728
- Raleigh, W. P., XIV, (193); XV, (227)
- Ralph, E. L., XIV, 260
- Ram, A., XI, 1433; XIII, (1227), 1476
- Ram, L. A., XV, 1867, 1875
- Raman, P. K., XIV, 432
- Ramanujam, S., XIII, 1530; XIV, (1030)
- Ramaswami, S. T., XI, 1082
- Ramdas, L. A., XIV, 124
- Ramos, M. M., XI, (1365)
- Ramsay, G. B., XV, 875
- Ramsbottom, J., XIV, 1294, 1433
- Ramsey, G. B., XI, (1229); XII, 907
- Ramsey, J. T., XIII, 148
- Ramsey, R. C., XV, 781, 893
- Ramstad, P. E., XV, (758), 1305
- Randall, G. O., XII, (4460)
- Randolph, L. F., XIV, 1805
- Ranninger, R., XIV, 794
- Rao, K. A. N., XII, (1095); XIII, 1009
- Rao, M. K. S., XIII, 592
- Rao, T. N., XV, 645, 1121
- Raper, K. B., XIII, 1616
- Raphael, T. D., XIII, 940; XIV, 1793; XV, 1703, 1771, 1843, 1846
- Rapin, J., XI, 818; XIV, 1696
- Rappaport, J., XI, 1098; XII, 338
- Rapson, A. M., XIII, 393
- Raptopoulos, T., XI, 389, (390); XV, 487
- Rasmussen, E. J., XIII, 839; XV, 1635, 1640
- Rasmussen, W. B., XV, 1756
- Ratera, E. L., XI, 795, (821); XV, (758)
- Rather, H. C., XI, 1246
- Ratner, E. L., XV, (34), 956, 957
- Ratsek, J. C., XI, (138); XII, 542; XIII, (240)
- Rattray, J. M., XI, 266, 267, 269, 270, 272, 273, 275, 276, (291)
- Rau, S. A., XV, 279
- Raucourt, M., XV, 1633
- Raw, A. R., XIV, 273
- Rawitscher, F., XV, 814
- Rawlins, T. E., XII, 114; XIII, 423; XIV, 1146
- Rawlins, W. A., XII, 157, (982)
- Ray, C., Jr., XIV, (1803)
- Ray, S., XV, (774)
- Ray, W. W., XIV, 1460
- Raychaudhuri, S. P., XIII, 866
- Raymond, W. D., XI, 551
- Rayner, D. S., XIII, 247; XIV, 1826; XV, 1202
- Rayner, M. C., XI, 655; XIV, (458)
- Rayner, R. W., XII, 1038, 1507; XIII, 1519; XIV, 1893; XV, 1939
- Raynor, R. N., XIII, 659
- Razdorskaja, L. A., XIV, 1661; XV, 123
- Read, F. C. E., XII, (1142)
- Read, F. M., XII, 75, 780; XIII, (225), 1449
- Read, J., XIV, 1330
- Read, W. H., XII, 1439; XIII, 1439, 1441
- Rebensburg, L., XIV, (691)
- Rebour, H., XIII, 760, 988; XIV, 1495, 1524, 1529, 1530, 2016; XV, 366, 1462
- Reder, R., XIII, 905
- Redgrove, H. S., XIII, 640
- Redmond, G., XV, 1043
- Reece, P. C., XIII, 570
- Reed, C. A., XII, 91; XV, 1532
- Reed, G. M., XI, 1291; XV, (1658)w
- Reed, H. M., XIII, 1058
- Reed, H. S., XI, 421; XII, 1353; XIV, 1799
- Reed, W. D., XII, 1539; XIII, 1368, (1369)
- Recher, M. M., XIV, (1803)

- Reeve, E., XIV, 447; XV, 413
 Reeve, J. O., XII, 209; XV, 1729
 Reeve, R. M., XIV, (834)
 Reeves, E. L., XI, 1159; XII, 851; XIII, 812, (845)
 Rege, N. D., XIII, 1578
 Rege, R. D., XII, 598, (659)
 Regeimbal, L. O., XIV, 70
 Regel, C., XII, 523, 1069, 1368; XIII, 903; XIV, 698; XV, 1373
 Rehling, C. J., XII, 821
 Rehm, P., XI, 268
 Reichelt, K., XIV, (641)
 Reichert, I., XII, 1409, (1450); XIV, 1267; XV, 1035, 1158, 1175, (1185)
 Reichsnährstand, Berlin, XI, (406)
 Reid, F. R., XV, 762, 1087
 Reid, J. J., XI, (1287); XIII, 1182; XV, 355
 Reid, M. E., XII, (18); XIII, 206
 Reid, R. D., XII, 1315; XIV, 135
 Reid, T. S., XII, 1344
 Reid, W. D., XIV, 800, 1792, 1838; XV, 1570, 1572
 Reid, W. J., XII, 492, 493
 Reifer, J., XV, (2060)a
 Reimer, C., XIII, 713; XV, 979
 Reineck, M. R. V., XV, 436
 Reinecke, O. S. H., XII, 94
 Reinecke, V., XIII, 1398
 Reingspach, J., XV, 2054
 Reinhart, W. L., XI, 339
 Reinhold, D., XII, 1400
 Reinhold, J., XI, 447, 473, 618; XII, 545, 1204; XIV, 914, 1430, (1431); XV, 686
 Reinicke, V., XI, 86
 Reinmuth, E., XII, (513), 926, 1410; XIV, 219
 Reitemeier, R. F., XIII, 1118
 Reiter, R., XI, 62
 Remiševskii, A. S., XV, 191
 Remussi, C., XI, (131)
 Renaud, M., XIV, 1493, 1528
 Rentschler, H., XV, (2060)b
 Repp-Nowosad, XIV, 808
 Resende, F., XV, 759
 Resühr, B., XI, 1276; XII, 185
 Reuther, W., XI, 1117, 1342; XII, 1266, 1486; XIV, 1948
 Reverdatto, V. V., XV, 175, 177, 655
 Revue horticole, XIII, 142
 Rewald, B., XIII, (1454)
 Reyes, G. M., XI, 1424
 Reynard, G. B., XIII, 1418; XV, 737, (758)
 Reyne, A., XI, 596
 Reyneke, J., XI, 73; XII, 58, 279; XV, 72, 73, 318, 319, 873
 Reynolds, D. S., XV, 206
 Reynolds, H., XV, 1521
 Rezende, A., XV, (758)
 Rhoads, A. S., XI, (872), (1320), 1322; XIII, 117, 252, (294); XV, (599)
 Rhode Island Agricultural Experiment Station, XIII, 667; XV, 943, 2077
 Rhodes, A. F. P., XII, (138)
 Rhodes, W. E., XV, (1336)
 Rhodesia Government Horticulturist, XIV, 742
 Riascos, L. C. C., XIII, (1553)
 Ribeiro, M. B., XIV, 397
 Ribèreau-Gayon, J., XIV, (2003)
 Ribiero, F., XIV, 1473
 Rice, M. A., XIII, 176
 Rice, P. L., XIV, 1160, 1180
 Rice, R. R., XIV, 1462
 Riceman, D. S., XI, (380)
 Rich, S., XIII, (231)
 Richards, A. V., XI, 143; XII, 551; XIV, 837, 891, 1365
 Richards, B. L., XIV, 797
 Richards, F. J., XIV, 1022; XV, 415
 Richards, J. G., XV, 707
 Richards, L. A., XII, 210, 767; XIV, (458); XV, 399
 Richards, M. C., XV, (598)
 Richards, P. B., XII, 1072
 Richardson, A. L., XI, (1278)
 Richardson, C. H., XI, 434; XV, 1099
 Richardson, H. H., XIV, 186, 656
 Richardson, J. E., XI, 105
 Richardson, J. K., XIV, 1774, 1776
 Richardson, L. T., XII, (180); XIII, (1445)
 Richey, H. W., XI, 319, 1058
 Richter, A. A., XII, 1180; XIII, 356; XV, 1386, 1387, 1388, 1389
 Rickett, H. W., XIV, 413
 Riecker, C. R., XIII, 1466
 Rieman, G. H., XI, 1223; XIV, (193)
 Riera, F. J., XV, 1449
 Ries, V. H., XII, 1564
 Rietsema, I., XIV, 1261
 Rigg, T., XV, 35, 742
 Rigotti, R., XIV, 501
 Riker, A. J., XII, 174, (462); XIII, (1270); XIV, 1131; XV, (598), (1071)
 Riollano, A., XIV, 257, 1796; XV, 313, 862
 Ripley, L. B., XIV, 631, 853
 Rippel, K., XIV, 1130, (1431)
 Ripper, W. E., XIV, 630; XV, 1651, 1943
 Ripperton, J. C., XIV, (365)
 Riškov, V. L., XIV, 126; XV, 157, 190
 Ritcher, P. O., XII, (462)
 Rivas, J. G., XII, 1113
 River, V., XV, 1566
 Rives, L., XI, 72
 Rivnay, E., XII, 567
 Roach, W. A., XIII, 800; XIV, 1570; XV, 529, 1683, 1686, 1687, 2081
 Roark, R. C., XII, 1342; XIV, 1658
 Robbins, R. C., XII, 673; XIII, 301
 Robbins, W. J., XI, (488); XII, (982); XIII, 17, 206; XIV, (793)
 Robbins, W. R., XII, 966; XIV, 1027
 Robbins, W. W., XIII, 659
 Roberts, A. N., XIV, 1811
 Roberts, C., XV, 564
 Roberts, E. A. H., XI, (248), 1501; XII, (695), (708); XIII, 1085
 Roberts, F. M., XIV, 788; XV, 215
 Roberts, J., XII, 983
 Roberts, J. W., XII, 442, 1338
 Roberts, O. C., XIV, 93; XV, 981, 1512
 Roberts, R., XII, 1213
 Roberts, R. H., XII, 352, 1242; XIII, 82, 1196; XIV, (534), 1762
 Roberts, W. O., XV, 529, 1544, 1545, 1546, 2081
 Robinson, C. W., XIII, 818
 Robertson, D. W., XIV, 278
 Robertson, J. K., XIV, 896
 Robinson, A. V., XI, 717
 Robinson, B. B., XI, 901; XIV, 202; XV, 632
 Robinson, D. H., XV, 1346
 Robinson, F. A., XIV, (1431)
 Robinson, H. G., XI, 801
 Robinson, R., XII, (1195)
 Robinson, R. R., XV, 617
 Robinson, T. R., XI, 847, 880, (965)
 Robinson, W. O., XII, 747; XIII, 1133
 Robison, U. M., XI, 1005
 Rochford, B., XIV, 1201
 Rockwood, L. P., XIV, (1803)
 Rodahl, K., XV, 2019
 Rodd, G. M., XIV, 1881
 Röder, K., XV, 626
 Roderick, D. B., XIII, 176
 Rodionov, A., XII, 97
 Rodrian, XIV, (1184)
 Rodrigo, A. del P., XIV, 682, 902
 Rodrigo, P. A., XI, 1355
 Rodrigues, A., XIV, (1063), 1091, 1092, 1093, 1094; XV, 1515
 Rodriguez, J. P., XIV, 1796
 Roe, H. B., XII, 37
 Roe, J. H., XIV, (2003)
 Roelofsen, P. A., XI, (650); XIII, 588
 Roessler, E. B., XIV, (1476)
 Rogers, J. B., XIV, 1519
 Rogers, L. H., XI, 1350; XIV, 1010
 Rogers, W. M., XI, (965); XIII, (589)
 Rogers, W. S., XI, 1121, 1122; XII, 1273; XIII, 92, 442, 810, 1192, 1215, 1243; XIV, 1517, 1552; XV, (83), 487, 518, 1012, 1505
 Rogovskol, P. A., XV, (34)
 Rohde, G., XII, 430
 Rohrbaugh, L. M., XIII, (225)
 Rohrbaugh, P. W., XII, (1480); XIII, 627, 628
 Rohwer, C., XV, 10
 Rokach, I., XI, 840
 Rolfs, F. M., XV, 99
 Rollins, H. A., XIV, 1516

AUTHOR INDEX

- Rollins, R. C., XIV, (1298); XV, 431, 662
- Romagnoli, M., XIV, 681
- Romasanta, R., XI, 1424
- Rombach, R., XIV, 1583
- Romberg, L. D., XII, 1281; XIV, (1567)
- Romero, A. G., XV, 1374
- Romney, V. E., XIV, (290); XV, 1745, 1746
- Romshe, F. A., XIII, 216, 1426; XV, 204
- Roodenburg, J. W. M., XV, 12
- Roque, A., XIII, (1032)
- Roses, —, XV, 1735
- Rosedale, J. L., XI, 247
- Rosene, H. F., XI, (380), (1092); XII, (39); XIV, 442, (1030), 1736
- Rosenfels, R. S., XIII, (129)
- Rosenstiel, R. G., XIV, 599
- Ross, A. A., XIV, 1675
- Ross, C. T., XV, 1779
- Ross, E., XIV, 1990
- Ross, R., XV, (2082)f
- Ross, W. A., XIII, 1324; XIV, 1172
- Ross, W. H., XI, 372; XV, 1004
- Ross, W. J., XI, 809
- Rossi, L., XI, (737)
- Roth, H., XIV, 925
- Rothmaler, W., XII, 1208
- Rottenburg, W., XII, 464
- "Rough Lemon", XIV, 305
- Roulon, —, XV, 994
- Round, M. B., XI, 878; XII, 578, 585; XIII, 997, 1464; XIV, 1825, 1872; XV, 1220
- Rousseau, A., XIII, (1087)
- Routien, J. B., XV, 1848
- Roux, —, XII, 501
- Roux, A., XIV, 165
- le Roux, J. C., XI, 165, (887), 895; XIII, 980, (1484); XIV, 660, 1078; XV, 247, 1074
- Rowe, C. W., XV, 495
- Rowe, L. R., XIII, 1134
- Rowe, W. H., XV, 919
- Rowson, J. M., XIV, 1238
- Roy, D. N., XII, 1339
- Roy, K. K. G., XV, 264
- Roy, R. S., XV, 217
- Roy, S. C., XII, 647
- Roy, W. R., XI, 860, 861; XV, 1203
- (Royal Entomological Society), XIV, 430
- Royal Horticultural Society, XII, 898, 1570; XIII, 466, 521
- (Royal Horticultural Society), XIII, 1461
- Royal Meteorological Society, XI, (650); XII, (1584); XIV, (1476); XV, (946)
- Rozeira, A., XV, 429
- Ruano Grajeda, V., XIV, 714
- Rubber Research Board, Ceylon, XII, 324, 635, 636, 1053, 1151; XIV, 957; XV, 928
- Rubber Research Institute of Malaya, XI, 215, 216, 939, 1043; XII, 255, 716
- Rubber Research Scheme (Ceylon), XI, 575, 581; XIII, 664, 1538, 1539; XIV, 347, 1358, 1360, 1361, 1362, 1363, 1916, 1917; XV, 1963, 1965, 1969, 1970, 1971
- Rubin, B., XII, 1237
- Rubin, B. A., XIV, 638, 1291
- Rubin, S. H., XV, (2060)c
- Rubtsov, G. A., XII, (791), 1210, 1211
- Ruckl, I. A., XV, 56
- Rudakova, M. M., XIV, 677
- Rudenko, A. G., XV, (1787)
- Rudkin, T. S., XIV, 1678
- Rudloff, C. F., XI, 428; XIV, 1066
- Rudolph, B. A., XIV, 1780
- Rudorf, W., XI, 420; XIII, (690); XIV, 56, 210, 484, 711, 802, 1583; XV, 162, (599), 2002
- Rudra, M. N., XIV, 1407
- Rue, J. L., XV, 597
- Ruediger, J. B., XV, 66
- Ruehle, G. D., XI, 586, 882, 885, 886, 948, 950, (1229), 1322, 1323; XII, (158); XV, (809), (1914)f
- Ruest, C., XIV, 344
- Ruhland, W., XIV, 1117
- Ruhlajadeva, N. M., XV, 649
- Ruiz Castro, A., XV, 1039
- Rumsey, E., XIV, 1268
- Runnels, H. A., XV, 598
- Runner, G. A., XII, 865
- Runov, V. L., XII, 1419
- Ruschmann, G., XIV, (458); XV, 25
- Rushton, E., XV, 2036
- Rusk, H. W., XIII, 446, (451)
- Russell, E. J., XI, 651, 1224; XII, 150, 1168; XIII, (947); XIV, (1), 428
- Russell, G. A., XIV, (635)
- Russell, J., XIII, 349, 1101
- Russell, J. P. C., XV, (1865)e
- Russell, R. S., XII, 256
- Russo, G., XII, 1477
- Rust, A. B., XI, (131)
- Ruth, W. A., XIV, 1070; XV, 1643
- Rutherford, D. M., XV, 784
- Ruys, J. D., XIV, (528)
- Ryall, A. L., XI, 736; XV, 541
- Ryan, C. E. V., XIV, (1932)
- Rygge, G. L., XV, 681
- Rzhevkin, A. A., XI, 1339
- S., E. H. G., XV, (1853)c
- S., Z. O., XV, 1556
- Sabalitschka, T., XI, 490; XII, 1453; XV, (2060)d
- Šablóvskii, B. I., XI, 1103
- Sabnis, T. S., XV, 296
- Sabour, XI, 1044
- Saccá, R. A., XI, 866, (872)
- Saccone, R., XI, (740); XII, 413
- Saenz Maroto, A., XII, 656
- Saha, J., XIV, (365)
- Said, H., XV, 685, 968
- Sakr, El. S., XII, (1454); XIII, 1393
- Sakr, E. S. M., XIV, (1803)
- Salaman, R. N., XI, 456; XIV, (193)
- Salamatov, M. P., XIII, 1154
- Sala Roqueta, R., XV, 1534, 1912
- Salgado, M. L. M., XI, 230; XII, 263, 265; XIII, 1550
- Salgues, R., XV, 1473
- Salisbury Agricultural Experiment Station, XIV, 965, 2027; XV, 1360
- Salisbury, E. J., XII, 881; XIII, 350, 1088; XIV, 427; XV, 22
- Sallans, H. R., XIV, 702, 703; XV, (1853)d
- Sallee, E. D., XIV, 411
- Salmon, E. S., XI, (1283); XII, 1395; XIII, 162, 488, 489, (490), 895, (1374); XIV, 1221; XV, (227)
- Salter, A. G., XII, 553
- Salter, R. M., XI, (380)
- Salyt, M. S., XV, 13, 124
- Samarina, A. P., XI, 917
- Samayoa (Mendez), O., XI, 564
- Samisch, R. M., XV, 492
- Sammet, K., XIV, 281
- Samoilov, I., XV, 673
- Samoilova, A., XIII, 1336
- Sampaio, S. C., XI, 572
- Sampson, D. F., XI, (1506)
- Sampson, H. C., XIV, 1442
- Samson, R. W., XIII, (219), 525; XV, (1853)e
- Samuel, C. K., XII, 613, (1095); XIII, 1298
- Samuel, G., XIII, (874)
- Samuels, C., XIV, 2000
- Sanchez Jurado, A., XV, 1742
- Sander, P., XIV, (297)
- Sanders, F. R., XIV, 896
- Sanders, H. G., XV, 135, (1406)h
- Sando, L. D., XV, 710
- Sandstedt, R. M., XV, 1065
- Sandstrom, W. M., XIII, (697)
- Sané, V., XIII, 618
- Sanford, G. B., XI, 460; XIII, 152
- Sanger, F., XIV, 190
- San Martin Casamada, R., XV, 1739
- Sannikov, V. S., XII, 820; XIV, 77
- Santa Barbara, L., XII, 1276, 1277; XIII, 1217
- Santiago de Vazquez, E. M., XV, (1406)f
- Santos, P. R., XI, 548
- Sanvictores, S., XI, 1486; XII, 308
- Sapoun, M. P., XI, 784
- Sapožnikov, D. I., XIII, 26
- Šarapov, N. I., XV, 151
- Šardakov, V. S., XII, 774
- Sarson, H., XII, 1282
- Šaruhanjan, F. G., XV, 646
- Šaškina, L., XI, 1135
- Sather, J. D., XV, 159
- Sattar, A., XV, 1886

AUTHOR INDEX

- Satterfield, G. H., XI, 61; XIII, 316
 Saunders, A. R., XIV, 1188, 1458
 Savage, C. G., XII, (85); XIII, 396
 Savage, E. F., XI, (984); XII, (85), 89; XIII, 75, 1190; XIV, (1545)
 Savchenko-Belskii, A., XV, 1164
 Savchenko, M. I., XII, 1415
 Savič, V. M., XV, 143
 Savič-Ljubickaja, L. I., XV, 173
 Savur, G. R., XV, (2059)
 Savvina, A. G., XIV, (1431)
 Saxby, S. H., XIV, 606; XV, 111
 Sayed, I. A., XIV, 393, 1337
 Sayre, C. B., XI, 119, 1256; XII, 159; XIII, 1422; XIV, 1726
 Sayre, J. D., XI, (441)
 Scaman, J., XV, 500
 Scarseth, G. D., XIII, (1182); XIV, 448; XV, 308
 Scarth, G. W., XI, 364; XV, 538
 Ščepot'ev, F. L., XIII, 1387
 Ščerbetov, A. N., XI, 893
 Schaben, L. J., XIV, 331
 Schachmayer, C., XIV, 1913
 Schaeede, R., XV, (432)
 Schaer, E., XII, 1133; XV, 1411, 1430
 Schalkwyk, S. J., XIII, 1574
 Schander, H., XII, 423, 786; XIV, (19), 1066, 1474, (2003)
 Schapelle, N. A., XI, 1461; XV, 310, 311
 Schär, A., XV, 358
 Scharff, J. W., XII, 1025
 Scharer, K., XII, 710, 947; XIV, 1282
 Schechter, M. S., XV, 1047
 Scheffer, F., XIV, (19)
 Scheibe, H., XII, 944
 Schell, H., XI, 492
 Schellenberg, A., XI, 1155; XV, 1559
 Schellenberg, H., XIV, 1095; XV, 347
 Schenk, A., XIV, 1097
 Ščepotiev, F. L., XII, 744
 Schermernhorn, L. G., XIII, 178, 261; XIV, 1746
 Schery, R. W., XII, 1019
 Scherz, W., XIV, (1184)
 Scheu, G., XIV, (1184)
 Scheurer, —, XV, 82
 Schieferdecker, H., XIV, (945)
 Schiele, P., XIII, 1176
 Schiemann, E., XIV, (458)
 Schilleter, J. C., XI, 319
 Schilling, E., XII, (1412)
 Schindler, H., XII, 494
 Schipp, J. L., XII, 997
 Schlenker, F. S., XIII, (20), 698
 Schlottfeldt, C. S., XV, 1595
 Schmalfuss, H., XV, 165, 1727
 Schmid, G., XIV, 1035; XV, 1412, 1438, 2039
 Schmid, H., XV, 1454
 Schmidt, C. M., XV, 367
 Schmidt, G., XI, (648); XV, 38
 Schmidt, G. A., XV, 1974
 Schmidt, H., XII, 909; XIV, (1298)
 Schmidt, H. W., XV, (1853)
 Schmidt, L., XII, (1536)
 Schmidt, M., XII, 372, (462), 1289; XIV, (290), 483, 485, 491, (1184), 1583
 Schmitt, H. G., XV, 1371
 Schmitt, J. B., XII, 1344; XIV, 1614
 Schmitt, L., XIV, 1026
 Schmitz-Hübsch, H., XI, (648); XII, 425; XIV, (1083)
 Schmöle, J. F., XII, 254
 (Schmuck, A.), XIII, 482
 Schmuck, A., XIV, (691)
 Schmuck, A. A., XIII, 140
 Schneble, K., XI, 503
 Schneider, C. L., XI, (347); XII, (765)
 Schneider, E., XIV, 1402
 Schneider, F., XV, 1625
 Schneider, G. W., XI, 1111; XIV, 88; XV, 493
 Schneider, H., XV, (597)
 Schneiders, E., XII, 415; XIV, (1567)
 Schofield, J. L., XII, 1027
 Schollenberger, C. J., XI, (380)
 Schöller, R., XIII, 848
 Schomer, H. A., XIV, 1273; XV, 422
 Schonken, D. B., XIV, (635)
 van Schoonneveldt, J. C., XII, 640
 Schoorel, A. F., XI, 195, 1376; XII, 1504
 Schopfer, W. H., XIII, 1624
 Schopp, R., XIV, 1813
 Schrader, A. C., XI, (1137)
 Schrader, A. L., XI, (737), (1137); XII, 1234; XIII, 72, 1052; XV, 515
 Schrader, T., XIV, 539
 Schrantm, G., XIV, (691)
 Schrank, A. R., XV, (432)
 Scratz, E., XII, 1411
 Schreiber, R., XII, 947; XIV, 1282
 van Schreven, D. A., XI, 1369
 Schröck, O., XIV, 802
 Schröderheim, J., XIV, 821
 Schroeder, C. A., XI, 876; XII, 574; XIII, 994, 995, 1498; XIV, 1871, 1920; XV, 1229
 Schroeder, C. W., XII, (708)
 Schroeder, E. M., XIV, 1950
 Schroeder, H., XIV, 289
 Schroeder, R. A., XII, 1386; XIII, (1454); XIV, 1747; XV, 1679
 Schropp, W., XIII, 900; XIV, 1075
 Schubert, W., XII, 427, 429
 Schuler, F. B., XV, 872
 Schulkers, R. D., XIV, 1673
 Schulle, H., XIII, 317
 Schulte, E., XI, 520
 Schultz, E. F., XII, 989, 1031, 1042; XIII, 609, 1385, 1386, 1489, 1548; XV, 1883
 Schultz, E. S., XIV, (193); XV, (227)
 Schultz, H., XV, (599), 749
 Schultz, H. K., XIV, 1729
 Schultz, W., XIII, 457
 Schulz, F., XII, 384, 817, 1259; XIV, 1055
 (Schulz, F.), XV, 481
 Schuphan, W., XI, 448; XII, 465, 701, 961; XIII, 774, 908, 1333; XIV, 1959
 Schussnig, B., XV, 209
 Schuster, C. E., XI, 1118; XIII, 58; XIV, 1104, 1562
 Schuster, M., XIV, (1803)
 Schuster, M. L., XIV, 197; XV, (598)
 Schuttrumpf, XIV, 1353
 Schütz, F., XIV, 98; XV, 1499
 Schwalm, H. W., XV, 1200
 Schwan, B., XV, 57
 Schwanbom, N., XII, 1563
 Schwanzer, —, XII, (513)
 Schwardt, H. H., XIII, (1347)
 Schwarz, E., XIV, 1097
 Schweig, C., XI, 1193
 Schweizer, J., XI, 202, 1384, (1402), 1411; XII, (627)
 Schweizer Bauernsekretariat, XV, 1413
 Schweizerische Gemüse-Union, XI, 1509
 Schwendiman, A., XIV, 181
 Schwilch, W., XV, 2044
 Schwimmer, S., XIV, 1973
 Scofield, C. S., XV, (227)
 Scotland, Department of Agriculture for, XIV, 1167
 Scott, A. D., XI, (641); XIV, (412)
 Scott, A. W., XV, 2036
 Scott, C. E., XIV, 122, 134
 Scott, D. H., XI, (737); XIII, (45); XIV, 931; XV, 452
 Scott, D. J., Jr., XIII, 440
 Scott, D. M., XII, 1238
 Scott, G. W., XI, 408
 Scott, J., XIII, 485
 Scott, L. B., XI, (248); XIII, 1366; XIV, 690
 Scott, L. E., XI, 1152; XIV, 540, 1612
 Scott, M. H., XV, (599)
 Scott, R. H., XIV, 1162
 Scott, R. J., XII, 1382
 Scott, W. C., XI, 630; XIV, 1429
 Scott, W. J., XIV, 1428
 Scripture, P. N., XV, 697, 1143
 Scully, N. J., XIV, 227
 Scupin, L., XIV, 924; XV, 691
 Seabrook, W. P., XV, 920
 Sears, F. C., XII, (833)
 Seaton, H. L., XI, 614
 Secrétariat des Paysans Suisses, XII, 729
 Secrett, F. A., XII, 910; XIII, 846, 847; XIV, 173, 651, 1193; XV, 605
 (Secrett, F. A.), XIII, 1330
 Sedky, A., XI, 299, 998; XII, (1142)
 Seemann, F., XII, 391
 Seemann, J., XIV, 655, 796, (1184)
 SeEVERS, H. V., XV, 1861

AUTHOR INDEX

- Seftick, H. J., XV, 81
 Segal, L., XII, 1144
 Seifert, G., XIV, 2010
 Seifritz, W., XIII, 685; XV, 965
 Selby, H. C., XIV, 1057
 Selby, M. F. H., XV, 804
 Sell, H. M., XII, 1012; XV, 805, 806
 Sellschop, J., XIII, 567; XIV, 1188
 Selman, I. W., XI, 423, 812, 814; XII, 1437; XIII, 1430, 1431; XIV, 783; XV, 703, 730
 Semakin, K. S., *see* Semyakin
 Semenova, O. S., XV, 955
 Semyakin, K. S., XI, 856; XIV, 839
 Sen, A., XIV, (1476)
 Sen, B., XII, 483, 942; XV, 164
 Sen, K. M., XIII, 653
 Sen, N. K., XIV, 1713; XV, 821
 Sen, P. K., XI, 947, 1040; XIII, 611; XIV, 893, 895
 Sen, S. C., XI, 937
 Senaratna, J. E., XV, (1298)
 Sendereckii, E., XV, 622
 v. Sengbusch, R., XIV, (729)
 Sen Gupta, J. N., XII, 224
 Senn, H. A., XI, 36
 Senurenkova, N. P., XV, 1380
 Serada, S. E., XII, 1249
 Serallés, J. J., XI, 206
 Serbinoff, V. I., XI, 755
 Seremetjevski, P. V., XIII, 458
 Sereni, D., XV, 1155
 Serranillos, M. G., XIII, 901; XV, 1736
 Séssous, G., XI, 492; XIV, (805)
 Seth, L. N., XV, 1297
 Sethi, D. R., XIII, 631
 Setterstrom, C., XI, 376
 Ševčenko, Z. I., XIV, 667
 Severin, H. H. P., XI, (488); XIII, (246), 949, 950, 951
 Sexton, W. A., XV, 1106
 Šablovskii, *see* Šablovskii
 Shafer, J., XI, (1073)
 Shafer, J. I., XIV, 1726
 Shah, S. V., XV, 360
 Shalucha, B., XI, 1056; XII, 4, (765); XIII, 362; XIV, (1030)
 Shamel, A. D., XIII, 548, 1469; XIV, 1833
 Sham Singh, XI, 144, 239; XII, 1462
 Shanor, L., XV, 1306
 Shapter, R. E., XI, 20, (1506)
 Shardakov, *see* Šardakov
 Sharma, H. N., XII, 1072
 Sharp, A., XI, (1287)
 Sharp, C. C. T., XI, (248); XIV, 1357; XV, 1958
 Sharp, M. A., XV, 179
 Sharp, R. H., XI, (900); XII, 1488
 Sharpless, B. H., XII, (587)
 Sharvelle, E. G., XIII, 533; XIV, (547)
 Shashkina, *see* Šaškina
 Shaulis, N. J., XIV, 1518
 Shaw, B. T., XIII, (702)
 Shaw, F. R., XI, (1197); XV, 998
 Shaw, H., XI, 1204; XIII, 102, 444, 1356; XV, 572, 1652
 Shaw, J. G., XIV, 1849; XV, 1231
 Shaw, J. K., XI, 1288; XII, 783, 795, 806, 823, 1228; XIII, 720, 1180; XIV, 37, 73, 1077, 1499, 1574; XV, 470, 1457, 1460
 Shaw, L., XIII, 612; XIV, 1866
 Shaw, R. S., XI, (821)
 Shaw, S. T., XII, 398
 Shay, J. R., XIV, (161); XV, (598)
 Šchepotiev, *see* Ščepotiev
 Shea, M., XII, 38
 Shear, G. B., XIV, 861
 Shear, G. M., XIV, 1577; XV, (1853)g
 Shear, S. W., XI, 700; XII, 1216
 Sheard, E., XIII, 1428, 1438, 1442
 Sheets, O., XII, 705
 Sheffield, F. M. L., XII, (194); XIII, 147, 1357; XIV, (673)
 Sheldon, W. H., XV, 1640
 Shema, B. F., XIII, 533
 Shen, T., XV, (1853)h
 Shenurenkova, N. P., *see* Šenurenkova
 Shepard, H. R., XII, (752)
 Shepardon, C. N., XV, (1914)d
 Shepherd, C. Y., XIV, (1932)
 Shepherd, A. D., XI, 1456
 Shepherd, E. F. S., XI, 190
 Shepherd, G., XI, 1230
 Sheremet'evski, *see* Šeremetjevski
 Sherman, G. D., XII, (1195)
 (Sherman, V. W.), XIV, 380
 Sherman, W. C., XI, (131)
 Sherrard, G. O., XII, 86; XV, 736
 Sherwin, R. A., XIV, 286
 Sherwood, H. M., XI, 851
 Sherwood, L. V., XV, 1102
 Shetlar, M. R., XIV, 1673
 Shewell-Cooper, W. E., XI, 450; XII, 317
 Shimoya, C., XV, 1953
 Shipman, H. J., XIV, (161)
 Shippy, W. B., XI, 1203; XV, (774)
 Shirck, F. H., XIII, 114
 Shishkin, *see* Šiškin
 Shive, J. W., XI, 349, 1074; XII, 746, (982); XIII, 226; XIV, 447, 1012, 1467; XV, 402
 Shoemaker, D. N., XIII, 132
 Shoemaker, J. S., XII, 792
 Short, R. M., XIV, 1970
 Shoushan, A. A., XV, 968
 Shoutoff, *see* Šutov
 Showalter, R. K., XIII, 201
 Shreve, F., XIII, (1553)
 Shropshire, L. H., XII, 148
 Shuey, P. McG., XIV, (19)
 Shukla, K. P., XIII, (1138)
 Shull, W. E., XV, 1596, 1629
 Shuman, H., XIII, 1588
 Shuttleworth, S. G., XII, 1170
 Shu Yi Chen (Shuk Yee Chan), XIII, 935
 Siddappa, G. S., XIII, 414, 1607; XV, 322, 352
 Sideris, C. P., XII, 1187; XIII, (375); XIV, 899, (1030), (1370)
 Sidorov, B. N., XII, (1412)
 Sieg, R. D., XIII, 650
 Siegler, E. A., XI, 78, 714; XIII, 1170, 1245; XV, 874, 1893
 Siegler, E. H., XII, (462), 1327; XIII, (451); XV, 1046, 1047
 Sierra, H. M., XV, 1716, 1840, 1913, 1972
 Sierra Leone Department of Agriculture, XI, 1045; XII, 332, 1158; XV, 1361, (1366)
 Sievers, A., XII, 1172
 Sievers, A. F., XIV, (635)
 Sil, J. M., XIV, 1397
 Silberschmidt, K., XI, 798; XIII, 871
 Sills, V. E., XI, 992; XII, 1132
 de Silva, C. A., XI, 580, 1408; XII, 639, 1050; XIII, (1021), 1022, 1023; XIV, 1354, 1355, 1356; XV, 1964
 Silva, F. J. R., XIV, 1919
 Silva, P., XV, 886
 de Silveira, A. H., XV, 909
 de Silveira, G. G., XIV, 989
 Simakov, N. S., XIV, 35
 Simanton, W. A., XV, 1660
 Siminovich, D., XI, 365, 366
 Simmonds, A., XIV, 38; XV, 441, 978, 1427
 Simmonds, F. J., XIV, 574
 Simmonds, H. W., XV, 1842
 Simmons, P., XIV, 932
 Simon, G., XIV, 1472
 Simonds, A. O., XIV, 733
 Simonds, P. W., XII, (708)
 Simons, A. J., XIV, 2068
 Simons, A. O., XIII, 422
 (Simons, R. D. G. T.), XI, 179
 Simpson, A. C., XIII, 517; XV, 568
 Simpón, C., XI, 385
 Simpson, C. P., XIII, 421
 Simpson, G. W., XII, (982)
 Simpson, H. J., XII, 652
 Simpson, J. I., XV, 1974
 Simpson, W. L., XII, 1167
 Sinclair, A. J., XII, 601
 Sinclair, W. B., XI, 889, 997, 1331, 1336; XII, 1478, (1480), 1491; XIII, 251, 560, 569, 962; XV, 262, (270), 781, 795, 796, 893, 1889, (2059)a
 Singh, B. N., XII, 688; XIII, 1130; XIV, (673)
 Singh, C. P., XII, 1077
 Singh, D., XIV, 401, (1406)i
 Singh, H. B., XIV, 564
 Singh, L., XIII, 1546, 1605, 1606; XIV, (110); XV, 248, 351, 503, 903
 Singh, M., XIV, 587
 Singh, R. N., XII, 452; XIII, 827; XV, 1601
 Singh, R. S., XI, 1101; XIII, 398, 1544, 1554
 Singh, S., XI, 1312; XIII, 969; XIV, (110); XV, 248
 Singh, S. B., XIV, 1873, 1876

AUTHOR INDEX

- Singh, S. K., XIV, 2005
Singh, U. B., XII, 441, 663, 1313;
XIV, 1604; XV, 91, 95
Sinha, A. C., XII, 1225; XIII,
1162
Sinnott, E. W., XII, (18); XIII,
(947); XIV, 251, (1803); XV,
(431), (758)
Sip, I., XIV, 1196
Sipos, F., XI, 478
Sircar, S. M., XIII, 653
Siskarian, N. M., XIV, 879
Sisal Experimental Station, Tan-
ganyika, XI, (1054)
Sisam, J. W. B., XIV, 33
Šiškin, B., XIII, 703
Šiškin, D. M., XV, 23
Sisler, G., XIII, 764; XV, 504
Sisler, G. P., XV, 1506
Sison, P. L., XII, 242
Sissakian, N., XII, 1237
Sittou, B. G., XIII, 1249; XIV,
1566
Sivori, E., XIV, 994
Skaling, P. E., XIII, 24
Skarbilović, T. S., XIII, 1383
Skelding, A. D., XI, (31)
(Skillman, E. E.), XV, 698
Skinner, A. F., XI, 14
Skinner, J. J., XIII, (23); XIV, 69
Skipwith, R. G., XIV, 531
Skirm, G. W., XIV, (1030)
Skok, J., XI, 485; XII, 472;
XIII, 932
Školjnik, M. J., XIV, 841
Skoolko, A. J., XV, 139
Skooq, F., XI, 332, 333; XIII,
10; XIV, 1218
Skottberg, C., XII, 732
Skripnichenko, L. A., XIII, 1400;
XV, 1682
Skripnikova, XIV, 603
Skutch, A. F., XII, 589
Skvortzov, B. W., XI, (1092)
Slade, R. E., XV, 1106
G. H., XV, 1007
Slate, G. L., XIV, 94, (1567);
XV, 1863
Slatensek, J. M., XV, 222
Slattery, M. C., XV, (1336)
Slepyh, D. A., XV, 2022
Slipp, A. W., XIV, (1803)
Sloan, W. J. S., XII, 1092
Sloop, K. D., XIII, 248
Slotemaker, A. C., XI, (248)
Small, T., XIII, 527; XIV, 192
Smart, H. F., XI, (291)
Smedley, H., XIV, (412)
Smec, C., XI, (167); XIV, 863;
XV, 829
Smieton, M. J., XI, 111
(Smirnov, A.), XIII, 482
Smirnov, A., XIV, (691)
Smirnova, M. I., XV, 156
Smit, B., XIV, 1619; XV, 1057
Smith, A. C., XII, 591
Smith, A. G., Jr., XV, 1857, 1862
Smith, A. J., XI, 869; XIV, 628
Smith, A. M., XI, 99
Smith, C. D., XII, 859
Smith, C. F., XI, 439; XII, 125;
XIII, 1293, 1303; XV, 577
Smith, C. L., XIV, 1565; XV, 525
Smith, C. M., XII, 1340; XIV,
620, 1648
Smith, C. O., XIV, 553
Smith, C. R., XIII, 141
Smith, C. W. R., XIII, 853, 1134
Smith, D. J., XII, 859
Smith, E., XI, 736, 971; XIII,
1560; XIV, (379)
Smith, E. A., XV, (431)
Smith, E. G. L., XIV, (1803)
Smith, E. H. G., XI, 314
Smith, E. L., XIII, 1076, 1129
Smith, F., XV, 395
Smith, F. F., XI, 823; XII, 984;
XIV, (297), 1620, 1662, (1816);
XV, 197, 242, (596), 702,
(774), 1697, 1698, 1762
Smith, F. G., XIV, (635)
Smith, G., XIV, 1434
Smith, G. F., XII, (982); XIII,
(367)
Smith, H., XIII, 49
Smith, H. H., XIII, 141, (893)
Smith, H. P., XIII, 1403; XV,
1766
Smith, H. R., XIV, 1983
Smith, H. S., XI, 160; XII, 1474
Smith, H. V., XIV, (1476)
Smith, H. W., XI, (1192)
Smith, J. B., XIII, 194
Smith, J. H., XV, 644
Smith, J. H. C., XI, 680; XIII,
(697); XIV, (1476)
Smith, K. M., XI, 120; XIII,
(874); XIV, 670, 1702, 1710;
XV, 543, 545, 1864
Smith, K. R., XIV, 1983
Smith, L. E., XII, (462), (1347)
Smith, L. G., XII, 123; XIII, 116;
XIV, 587
Smith, L. J., XIII, 1601
Smith, L. M., XII, (1347); XIII,
826
Smith, M., XIV, 933; XV, 341,
885
Smith, M. A., XIII, 843; XV,
199, 553, 875
Smith, M. B., XIV, 1561
Smith, M. C., XI, (1506); XV,
2028
Smith, M. G., XV, 343
Smith, M. R., XI, 246; XIII, 1012
Smith, O., XII, 152, 1375, 1377;
XIII, 644; XIV, 1958
Smith, P. F., XII, 346; XIV,
1722; XV, 181, 1748
Smith, P. G., XIV, (1803); XV,
213, 1182
Smith, R., XIV, 1814
Smith, R. E., XII, 120; XIV, 589
Smith, R. J., XV, 788
Smith, R. M., XII, 735
Smith, T. E., XIII, 483; XIV, 688
Smith, W. H., XV, 869
Smith, W. P. C., XI, (1287); XII,
(1454); XIV, 1260; XV, 1538,
1832, 1892
Smith, W. S., XII, 1078; XIII,
296
Smith, W. W., XIII, 1559; XIV,
(1184); XV, 1855
Smitt, N. K., XIV, 1653; XV, 122
Smock, R. M., XI, 972; XII, 103,
277, 1523; XIII, 303, 304;
XIV, 367, 368, 906, 1941;
XV, 483, 1299, 1300
Smolin, A. A., XIV, 1240
Smoyer, K. M., XI, 170, 881;
XII, 553; XV, 1200
Snapp, O. I., XI, 761, (1187);
XIII, 433; XIV, 600, (635),
1149, 1631
Snell, E. E., XIV, 1406
Snell, K., XII, 789, 1370
Snell, W. H., XIV, (1803)
Snelling, R. O., XII, 107
Snoep, W., XI, 927, 1381; XII,
624
Snow, D., XV, 1178
Snow, M., XIII, 7
Snow, R., XII, 1174; XIII, 7, 8
Snyder, E., XII, 1299; XIV, 1559
Snyder, G. B., XI, (1238); XIV,
272
Snyder, J. C., XII, 92, 278; XIII,
85, (125), 1173; XIV, 1538,
1539
Snyder, T. E., XIV, 868
Snyder, W. C., XIII, (231); XV,
(598)
Snyder, W. E., XI, (380)
Snyman, S., XIII, 1574
Soares, C., XI, 793
Sobel, A. E., XV, (1336)
Society of Chemical Industry,
XIV, 1203
Society of Chemical Industry and
the Institute of Brewing, XI,
(1054); XII, (723); XIII,
(672); XIV, 966
Söding, H., XII, 1384; XV,
(1853)i
Sohi, G. S., XV, 613
Soil Science, XI, (689)
(Soil Science), XV, 406
Sokoloff, N. P., XI, 1008
Sokoloff, V. P., XI, 1326; XII,
1005; XIII, 551, 1474; XIV,
843; XV, 1219
Sokolov, N. N., XII, (1412)
Sokolova, A. M., XIV, 770
Sokolskaya, B. P., XI, 852
Sokolskaya, V. P., XII, 995
Soliman, G., XIII, (656)
Solodovnikov, F. S., XIV, 189
Solomon, M. E., XIV, 1392;
XV, (972)
Solov'eva, M. A., XIII, 1240
Somers, I. I., XII, (982); XIII,
226
Somers, L. A., XI, 804
Sommer, A. L., XII, (367)
Sonesson, N., XIV, (528)
Sontakay, K. R., XV, 1897
Sorber, D. G., XIV, 1415
Sorensen, H. G., XIII, 290; XV,
1291
de Soriano, A. M., XIV, 930
Sörlin, A., XIV, (528)
Soroa, J. M., XV, 1115, (1336) .
Sosnovetz, A. A., XII, 1066
South Africa, Chief Fruit Inspec-
tor's Office, XII, 827

AUTHOR INDEX

- South Africa, Union of, Department of Agriculture, **XI**, 32, 327, 518, 699; **XII**, 720, (1009); **XIV**, 1188; **XV**, 36, 1362
- (South Africa, Union of, Department of Agriculture), **XIII**, 1634; **XIV**, 1448; **XV**, 1362
- South Australia, Minister for Agriculture, **XI**, 1046
- Southern Rhodesia Department of Agriculture, **XI**, (1054); **XIV**, (458), 1856; **XV**, 2078
- Southwick, F. W., **XII**, 133; **XIII**, 303; **XIV**, 906; **XV**, 872
- Southwick, L., **XII**, 804, 806, (1246); **XIV**, **XIII**, 720, 1197, 1255; **XV**, 1486, 1499, 1541, 1574; **XV**, 470, 872, 981
- Southwick, R. W., **XII**, 105, 214, 1465; **XV**, 1878
- de Souza, A. J., **XV**, 284
- de Souza, L. J., **XI**, (1506)
- Soviet Home Service (Wireless), **XIV**, 1031
- Soyano, Y., **XI**, (1067)
- Spaning, M., **XII**, 1411
- Spanish Territories in Gulf of Guinea, *see* Dirección General de Marruecos
- Spanner, L., **XII**, 354
- Sparrow, K., Jr., **XIV**, 2004
- Spencer, E. L., **XI**, 820; **XII**, 192
- Speroni, H. A., **XIV**, 835, 847
- Speyer, E. R., **XI**, 509; **XIII**, 1342, 1345, 1346
- Speyer, W., **XIV**, 1618, 1623
- Spicer, R. W., **XIII**, 811
- Spiegelberg, C. H., **XI**, 305
- Spies, J. R., **XIV**, (2003)
- Spiller, D., **XIV**, (1662)
- Spilsbury, R. H., **XI**, (695)
- Spivakovskij, N. A., **XIII**, 750
- Spoehr, H. A., **XIII**, 1126
- Spoerri, P. E., **XV**, 1126
- Spoon, W., **XI**, (248)
- Sprague, V. G., **XI**, (1073); **XIII**, (375)
- Spranger, N. D., **XV**, 634
- Spreng, H., **XIV**, 80; **XV**, (74)
- Sprenger, (A. M.), **XI**, 1481
- Springensguth, W., **XII**, 612
- Springer, G., **XV**, 1475
- Springett, —, **XIII**, 277
- Spurr, C., **XV**, 69
- Spurr, W. B., **XIV**, 443, 1207
- Spurway, C. H., **XI**, 352; **XII**, 32; **XV**, 1690
- Squire, F. A., **XV**, 1265
- Sreenivasan, A., **XV**, (2059)*v*
- Sreerangachar, H. B., **XI**, 559, (641); **XII**, (708); **XIII**, 1615, (1620); **XIV**, 399, (1431)
- Srinivasan, K. H., **XI**, 926
- Srinivasan, M., **XIV**, 1398
- Srivastava, R. C., **XII**, (1095); **XIII**, 1009
- Sroelov, R., **XIII**, 689
- S.S. and F.M.S., *see also* Malaya, **XI**, 1006; **XII**, (259), 333, 715
- Stackelberg, A. A., **XV**, 1041
- Stachelin, M., **XI**, 759, 770, (779); **XII**, 1097; **XIV**, 1107
- Stafford, W., **XIV**, 675
- Stahl, A. H., **XI**, 979
- Stahl, A. L., **XIII**, 1047; **XV**, 877
- Stählin, A., **XIV**, 1227
- Stahmann, M. A., **XIII**, 1408; **XIV**, 1259
- Stair, E. C., **XIII**, 201, (219), (1445); **XIV**, 262
- Stalé, J., **XIV**, 1096
- Standley, P. C., **XIII**, (1553)
- Staniland, L. N., **XI**, 834; **XIII**, (877); **XV**, 1564
- Stanley, E. C., **XV**, 2036
- Stanley, W. M., **XI**, (1287); **XIII**, (1265); **XIV**, 1122
- Stanwood, E. T., **XV**, 847
- Stanworth, J., **XII**, 1542; **XIII**, 326
- Stapel, C., **XV**, 582
- Staple, W. J., **XI**, (695)
- Staples, R. R., **XII**, (603), (1095)
- Stapp, C., **XII**, (1318), 1383; **XIV**, (635), 1132, (1184), (1803)
- Starcher, G. C., **XI**, 51
- Stark, F. C., Jr., **XIII**, (1454)
- Stark, F. L., Jr., **XIII**, 217; **XV**, 741
- Stark, W. H., **XV**, (1336)
- Starr, D. F., **XV**, 1231
- Starr, G. H., **XIII**, 938
- State, G. L., **XV**, 507
- Staten, H. W., **XV**, (227)
- Station fédérale d'essais viticoles et arboricoles à Lausanne et Domaine de Pully, **XII**, 1154; **XIV**, 1441
- Stauffer, J. F., **XIV**, 986; **XV**, (720)
- Stcherbakoff, *see* Ščerbatov
- Stead, H. A. J., **XI**, 23
- Stearn, W. T., **XIII**, 1401; **XV**, 1159
- Steedman, J., **XIII**, 1078; **XV**, 327, 2024
- Steelman, C. H., Jr., **XV**, 456
- Steeaman Nielsen, E., **XIV**, (1030)
- Steenkamp, J. L., **XI**, 127
- Steer, W., **XI**, 1183, 1204; **XII**, 1334
- Steere, W. C., **XV**, 1290
- Steinbauer, C. E., **XIII**, (1553); **XIV**, 1857
- Steinberg, R. A., **XIV**, 1015
- Steinegger, P., **XIV**, 139
- Steiner, E. T., **XV**, (1336)
- Steiner, H. M., **XI**, 1190; **XII**, 454; **XV**, 1606, 1645
- Steiner, L. F., **XIII**, 1299, 1302; **XIV**, 144, 620
- Steinschneider, K., **XI**, 146
- Stellwaag, F., **XIV**, 635, 1558; **XV**, (599)
- Stelzner, G., **XII**, 953; **XIV**, (673), 735; **XV**, (758)
- Stene, A. E., **XII**, 408
- Stenhouse, A. S., **XIV**, 1880
- Stenlid, G., **XIV**, 1016
- Stepanov, P. A., **XIV**, 31
- Stephen, V. A., **XII**, 893; **XIII**, 1106
- Stephens, C. G., **XIII**, (1138)
- Stephens, S. E., **XIV**, 1877, 1931; **XV**, 312, 1987
- Stephens, S. G., **XIV**, 1332
- Stephenson, C. C. S., **XIII**, 658
- Stephenson, R. B., **XIII**, 518
- Stephenson, R. E., **XI**, 1118; **XIII**, 58; **XIV**, 1104
- Stevens, E. N., **XIII**, 1242
- Stevens, H. E., **XI**, 890
- Stevens, J. W., **XIV**, 1991
- Stevens, N. E., **XII**, 417; **XIV**, 102, 1127; **XV**, 520
- Stevens, R. B., **XII**, 417
- Stevenson, E. C., **XV**, (1298), (1658)*x*
- Stevenson, F. J., **XI**, (131); **XIII**, (877); **XIV**, (1803); **XV**, 621
- Stevenson, G. C., **XI**, (248), (608)
- Stevenson, H. A., **XV**, 1483
- Stevenson, J. A., **XIII**, (893); **XIV**, (1662); **XV**, 1966
- Steward, F. C., **XI**, (380), (1092); **XIII**, 357
- Stewart, A. B., **XII**, 1361
- Stewart, C. P., **XII**, (295)
- Stewart, D. F., **XIV**, 1428
- Stewart, R., **XIV**, 777
- Stewart, R. P., **XIII**, 1392
- Stewart, W. S., **XI**, 1061; **XII**, 1192; **XIII**, 363; **XV**, (1298)
- Steyermark, J. A., **XIII**, (1553)
- Steyn, D. G., **XI**, 377
- Stiles, W., **XI**, (31)
- Stillings, E. N., **XIV**, 223
- Stimson, C. R., **XI**, 289
- St. John, H., **XIII**, 1030
- St. John, J. L., **XII**, 22, 1248
- St. Lucia, B.W.I., Department of Agriculture, **XI**, (1054), (1526); **XII**, 1581; **XIII**, (1638); **XV**, (391)
- Stoa, T. E., **XIV**, 1208
- Stocking, C. R., **XV**, 1157
- Stöckli, A., **XV**, 588
- Stoddard, D. L., **XIII**, 923
- Stoddard, E. M., **XII**, 111; **XIV**, (547), 617; **XV**, (598)
- Stoffberg, F. J., **XIII**, 980, (1484); **XIV**, 660, 754
- Stoffels, E. H. J., **XIV**, 1352; **XV**, 281, 1929
- Stofmeel, W. S., **XV**, 772
- Stoker, G. L., **XI**, (1235)
- Stoll, K., **XII**, 445
- Stoller, B. B., **XIV**, 816
- Stone, A., **XII**, 1076
- Stone, C. L., **XII**, 95; **XIV**, (115)
- Stone, M. W., **XIV**, (665), 1681
- Stone, R. W., **XII**, (708)
- Stone, W. E., **XIII**, 154
- Stoney, J., **XIV**, 2011
- Storck, A., **XII**, 1364; **XIII**, 89, 234; **XIV**, (834)
- Storey, H. H., **XI**, (441)
- Storey, I. F., **XIII**, 943
- Storey, W. B., **XII**, 266
- Stotz, E., **XV**, 2038
- Stoughton, R. H., **XI**, 12, 135; **XII**, 730; **XIV**, 2007

AUTHOR INDEX

- Stout, G. J., **XI**, 118
 Stout, M., **XI**, 103; **XIV**, 1212
 Stout, P. R., **XI**, 478
 Stoutemeyer, V. T., **XII**, 341, 534, 1197; **XIII**, 1123; **XIV**, 1465; **XV**, 464, 810, 1087, 1400
 Stoy, O., **XII**, 824; **XIV**, 123
 Strachan, C. C., **XI**, 1471; **XII**, 687; **XIII**, 1070; **XIV**, 1408; **XV**, 1409
 Straib, W., **XIV**, 801
 Strand, A. B., **XV**, 140
 Straughan, W. R., **XIV**, 769
 Strickland, A. G., **XII**, 76; **XIII**, 1246; **XIV**, 1664; **XV**, 434
 Stringer, A., **XIV**, 1644
 Stromberg, E. O., **XI**, 879
 Strong, F. M., **XV**, (1336)
 Strong, M. C., **XII**, 171; **XV**, 1811, 1817, 1820
 Strong, W. J., **XIV**, 1084; **XV**, 1008, 1011
 (Strong, W. J.), **XV**, 1506
 Struckmeyer, B. E., **XII**, 11, 1242; **XIII**, 82, (375), 1196; **XIV**, (534), 1762; **XV**, (431)
 (Strunck, R.), **XIV**, 125
 Struthers, J., **XIV**, 976
 von Struve, A. W., **XI**, 486
 Stuart, A., **XIII**, (478)
 Stuart, N. W., **XI**, 749, (779), (1300); **XIV**, 291, (297); **XV**, 770
 Stubbings, W. A. K., **XI**, 73; **XV**, (128), 1045
 Stubbs, J., **XI**, 773
 Stubbs, L. L., **XI**, 1245; **XII**, 981; **XV**, 682
 Stuckey, I. H., **XII**, (367)
 (van Stuivenberg, J. H.-M.), **XIV**, (193)
 Stultz, H. T., **XI**, 1200
 Sturrock, D., **XI**, 955
 St. Vincent Department of Agriculture, **XI**, 1047, (1526); **XIII**, (347); **XV**, (946)
 Subramanyam, V. K., **XI**, 205
 Sudds, R. H., **XI**, 692, 750; **XII**, 81; **XIII**, 1166; **XIV**, (161), 1498, 1500, 1515; **XV**, 59
 Sugarcane Breeding Station, Barbados, **XIII**, (672)
 Sugarcane Investigation Committee, Trinidad, **XI**, (1054); **XII**, (273); **XIII**, (672); **XV**, (2082)^f
 Sugarcane Research Station, Mauritius, **XI**, 1037; **XII**, (1584); **XIV**, 968; **XV**, (946)
 Sugawara, T., **XI**, 286, 1068; **XIII**, 38
 Sugihara, J., **XII**, 297, 1125, 1130; **XV**, (2060)^e
 Sugiyama, T., **XII**, 134
 Sugurappa, S., **XIV**, 836
 Suhorukov, K. T., **XV**, 1386, 1387, 1388, 1389
 Suhov, K. S., **XV**, (128)
 Suit, R. F., **XIV**, (1567)
 Sukhatme, P. V., **XII**, 597
 Sukhorukov, *see* Suhorukov
 Sukhov, *see* Suhov
 Sukorceva, K. D., **XV**, 1769
 Sullivan, W. N., **XIV**, 156
 Summerland, S. A., **XIV**, 144
 Summerville, W. A. T., **XII**, 1093; **XIV**, 1368, 1829, 1876
 Sun, Y.-P., **XV**, 1836
 (Sundays River Research Station), **XV**, 246
 Sunnell, A., **XV**, 2015
 Surdutovich, J. M., **XII**, 923
 (Surrey War Agricultural Committee), **XV**, 486
 Susahib-ud-Din, M., **XV**, 1874
 Su-sin Lee, C., **XIV**, 1657
 Sulslova, M. k., **XIII**, 1233, 1234
 Suter, A. F., **XV**, 2056
 Sutherland, M. D., **XIV**, 1399
 Sútov, P. A., **XI**, 904
 Suttle, W. C., **XI**, (641)
 Svadovskaya, N. P., **XI**, 1375
 Svenson, H. K., **XII**, 590
 Svenson, V. R., **XIV**, 1224
 Sverdlina, K., **XII**, 1419
 Svolba, F., **XIV**, 504
 Swaby, R. J., **XIII**, 64, 946; **XIV**, 927; **XV**, 21
 Swamirao, R., **XI**, 1082
 Swamy, R. L. N., **XI**, (248), 568
 Swan, D. C., **XII**, 893
 Swanson, C., **XV**, 1600
 Swanson, C. P., **XV**, 443
 Swanson, P., **XI**, 163
 Swarbrick, T., **XII**, 796, 810; **XIII**, 37, 738, 767, 775; **XIV**, 1533, 1553; **XV**, 92, 549, 1439, 1487, 1809, 1810
 Swartley, J. C., **XI**, 1057; **XII**, 340; **XIV**, (1816)
 Swartwout, H. G., **XIV**, 1085
 Swartz, D. B., **XII**, 339
 Swarup, S. R., **XIV**, 1088
 Sweeney, B. M., **XIII**, 364; **XIV**, 1000
 Sweet, R. D., **XV**, 684
 Sweetman, H. L., **XV**, (1071)
 Swift Current Dominion Experimental Station (Agricultural Engineering Division), **XI**, 279
 Swingle, M. C., **XIV**, 1645; **XV**, 1061, (1185)
 (Swingle, W. T.), **XIII**, 957
 Swingle, W. T., **XI**, 438
 Sycenko, F. Z., **XII**, 970
 Sydenham, F., **XIII**, 571; **XIV**, 530
 Sylvan, H., **XV**, 459
 Sylvestre, E. P., **XV**, 110
 Symontowne, R., **XIV**, 349
 Synerholme, M. E., **XV**, 1062, (1406)^j
 Tabor, P., **XII**, 1501; **XIII**, 859
 Tafo, Cocoa Research Station, **XIV**, 2021
 Takagi, I., **XI**, (1079)
 Takahashi, W. N., **XIII**, 96; **XV**, (598)
 Talati, R. P., **XII**, (1095)
 Talbert, T. J., **XIV**, 1087, 1103
 Taljokovski, A. I., **XII**, 1109
 Tallarico, G., **XIII**, 133
 Tam, R. K., **XIV**, 361, 1641; **XV**, 1296
 Tamai, T., **XI**, 1100
 Tammes, P. M. L., **XI**, 232
 Tamura, S., **XI**, 113
 (Tanaka, T.), **XIV**, 1314, 1315
 Tandon, G. L., **XIV**, 394
 Tang, Y.-W., **XV**, 971
 Tanganyika, Coffee Research and Experimental Station, **XI**, 1048, 1522; **XII**, 1582; **XV**, 388
 Tanganyika Department of Agriculture, **XI**, (1054); **XII**, 1159, (1584); **XIII**, 1635, (1638); **XIV**, (2030)
 Tanganyika, Director of Agricultural Produce, **XV**, 389
 Tanganyika, Sisal Experimental Station, **XI**, (1054)
 Tanner, F. W., **XIII**, 1074
 Tanquary, M. C., **XII**, (57)
 Tapley, W. T., **XI**, 284
 Tarabanoff, J., **XIV**, 338
 Taran, E. N., **XI**, 899, 1344
 Tasmanian Department of Agriculture, Horticultural Division, **XII**, (383); **XV**, 1829
 Tatarintsev, A. S., **XII**, 55; **XIII**, 716
 Tate, H. D., **XV**, 1065
 Tatman, E. C., **XI**, 1258, 1259
 Tattersfield, F., **XI**, 180; **XIV**, (161), 623
 Taubken, H. R., **XV**, 326
 Taunay, A. de E., **XV**, 1940
 Tausson, W. O., **XV**, 1, 1141
 Tavazé, P. G., **XII**, 836; **XIV**, 683
 Tawell, G. H., **XV**, 1084
 Tayal, J. N., **XI**, 570
 Taylor, A. L., **XIV**, 661; **XV**, 567
 Taylor, C. A., **XII**, 996
 Taylor, C. F., **XIV**, (547), 614; **XV**, 1306
 Taylor, D. D. C., **XI**, 635
 Taylor, E. L., **XV**, 589
 Taylor, E. M., **XI**, 1356
 Taylor, G. G., **XII**, 108, 109, 885; **XIV**, 580, 1263, 1605; **XV**, 1825
 Taylor, H. A., **XV**, 805
 Taylor, H. V., **XI**, 102, 1205; **XII**, 895, 896, 897, 901, 1355; **XIII**, 847; **XV**, 439, 921, 1073
 (Taylor, H. V.), **XV**, 698
 Taylor, J. E., **XIII**, 585
 Taylor, J. K., **XI**, 65; **XIII**, (1138)
 Taylor, L. V., **XIV**, 411
 Taylor, M. C., **XV**, 315
 Taylor, R. E., **XI**, (836); **XIII**, 19
 Taylor, T. H. C., **XV**, 1942
 Tchkhaidze, *see* Chaidze
 Tea Association, Indian, *see* Indian
 Teakie, L. J. H., **XII**, 151, 385; **XIV**, (193), 542, 556
 Tea Research Institute, Ceylon, **XI**, 1513; **XII**, 1574; **XIV**, 956; **XV**, 929

AUTHOR INDEX

- Tea Research Institute, Ceylon,
Experimental Sub-Committee,
XIII, 1512
- Tecson, A. L., XI, 1355
- Teichmann, L., XI, (416)
- Teixeira, L. P., XIV, 1915
- Teller, A. de Q., Jr., XV, (865)
- Tempamy, H. A., XII, 1022, 1145;
XIV, 1881
- (Tempamy, H. A.), XIV, 883
- Temperton, H., XIV, 392
- Templeman, W. G., XI, 341, 659,
672; XV, 1106
- Templeton, W. C., Jr., XII, (462)
- Tendand, D. J., XIV, 1769
- Tennyson, G., XII, 571
- Teodorescu, I. C., XI, 410, 415
- Terry, H. B., XI, (821); XII, 222;
XV, 976
- Ter-Saakian, T. S., XII, 1374;
XV, 144
- Tervet, I. W., XV, 752
- Teske, A. H., XIV, (1662)
- Tessier, H., XIV, (19)
- Teter, N. C., XV, 635
- Texas Agricultural Experiment
Station, XI, 1049; XII, 334,
(337), (1584); XIII, (347);
XV, 1363
- Tezima, K., XIII, 52
- Thakurta, A. G., XI, 1416; XIII,
361
- Thatcher, F. S., XIII, 157
- Thayer, J. W., Jr., XIII, 220
- Theron, C. J., XI, 1142; XIV,
1412; XV, 78
- Thies, W. H., XV, 990, 1637
- Thimann, K. V., XI, 333, 1267;
XIII, 10; XIV, 997
- Thom, C. L., XV, 1178
- Thomas, A. J., XII, (736)
- Thomas, A. S., XI, 1373; XII,
1030; XIII, 276, 1025, 1503;
XIV, 878; XV, 280
- Thomas, C. A., XIII, 230; XIV,
(1184)
- Thomas, C. T., XV, 1171
- Thomas, D. C., XIV, 1680
- Thomas, E. E., XII, 994
- Thomas, H. E., XII, 114; XIII,
98, 239
- Thomas, H. Earl, XIV, 122, 1594
- Thomas, Harold E., XIV, 122
- Thomas, H. R., XIII, 910; XIV,
265, 787, 1777; XV, (1853)e
- Thomas, I., XIII, (874)
- Thomas, J. E., XIII, 784
- Thomas, J. O., XIII, 330
- Thomas, L. A., XV, 54, 1021
- Thomas, M., XII, 1099
- Thomas, M. D., XIV, 1470
- Thomas, P. H., XI, (737), 1472;
XII, 463; XIII, 714; XV,
1671
- Thomas, P. T., XII, (388); XIII,
32, 135, 1413
- Thomas, R., XII, (1518)
- Thomas, W., XI, 477; XII, 178,
512; XIII, 222; XIV, 4,
(268), 1512; XV, 729, 1480
- Thomas, W. A., XI, 29; XIII,
432
- Thompson, A., XI, 178, 1378;
XII, 238
- Thompson, A. C., XI, 1206
- Thompson, A. H., XIV, (2003)
- Thompson, A. R., XIV, 1580
- Thompson, B. G., XIV, 605; XV,
1764
- Thompson, C. R., XI, 1016;
XIII, 757; XV, 84, 922
- Thompson, E. C., XI, 1102; XV,
1444, 1561
- Thompson, E. G., XV, 198
- Thompson, F. B., XV, 114
- Thompson, F. C., XI, 136, 826,
827, 828; XII, 495; XV, 1760
- Thompson, H. A., XIII, (287),
(601), (1016)
- Thompson, H. C., XI, 93; XII,
(1454); XIII, 1393; XV, (758)
- Thompson, H. H., XIII, 1043
- Thompson, J. K., XI, 97, 98;
XII, 495
- (Thompson, J. McL.), XIII, 352
- Thompson, N. F., XIII, 1242
- Thompson, R. C., XIII, 372,
(1412); XIV, 1748; XV, 699,
702
- Thompson, R. W., XV, 1008,
1011
- Thompson, S. G., XIV, 1569,
1572; XV, 1544, 1547
- Thompson, W. L., XI, 868, 870,
(872), 1322, 1328; XIII, (562)
- (Thompson, W. R.), XIV, (1185)
- Thomson, J. R., XIV, (635)
- Thomson, J. R., Jr., XIV, 1149
- Thomson, R. H. K., XI, 69, 254
- Thornberry, H. H., XIII, 186
- Thorne, D. W., XIV, 1113
- Thornell, S. A., XI, 39, 40
- Thornton, B. J., XII, 1329
- Thornton, H. G., XV, 967
- Thornton, N. C., XI, 376, (1300);
XII, 283, 285, 1533, 1534;
XIII, 1567, 1568; XIV, 370,
(918), 1950; XV, 607, (758),
1384
- Thorold, C. A., XI, 958; XIV,
342, 884; XV, 1253, 1274
- Thullbery, H. A., XI, 867
- Thuriaux, L., XIV, (2003)
- Thurston, H. W., Jr., XII, 446;
XIII, 443
- Thut, H. F., XIV, 985
- Tibyrçić, I. W., XV, 820
- Tice, G. A., XI, 339
- Tidbury, G. E., XIII, 602, 619;
XIV, 898, 1929; XV, 2009
- Tiedjens, V. A., XII, 144; XIII,
178, 261; XIV, 1746
- Tihonov, N. N., XIII, 1153;
XIV, 104
- Tihonova, A. S., XIV, 47
- Tikhonov, see Tihonov
- Tilford, P. E., XII, 154
- Tiller, L. W., XI, 1448; XII, 696,
1100
- Tilt, J., XIII, 879; XV, 1713
- Timm, E., XIV, (759)
- Timmons, F. L., XII, 1331
- Timofeev, I. I., XIV, 1806
- Timonin, M. I., XII, 358
- Timson, S. D., XII, 1483; XIII,
(159)
- Tinckley, M. A. H., XI, 331; XII,
1430; XIII, 243, 688; XIV,
738, 825, 827; XV, 1145
- Tindale, G. B., XI, 252, 259, 611,
613; XIII, 305, 1037, 1258;
XIV, 911, 916, 1378; XV,
2006
- Ting, S. V., XIII, 165
- Tingley, M. A., XIV, 982
- Tinley, N. L., XII, 474
- Tint, H., XV, 1393
- Tippo, O., XIII, (1138)
- Tirelli, M., XII, 420
- Tiscornia, J. T., XV, 79
- Tisdale, W. B., XI, 1286; XV,
1983
- Tisdale, W. H., XII, (1347)
- Tisdall, A. L., XIII, 83, 84
- Tissot, A. N., XV, 611
- Tiver, N. S., XV, 625
- tleuz, G. L., XIV, 537
- Tobler, F., XIII, 885; XIV,
(365), (1803); XV, (758)
- Tobler, H. D., XII, 413
- Tocklai Experimental Station,
see Indian Tea Association
- Todd, A. R., XIV, 944
- Todd, J. C., XV, 1481
- Todhunter, E. N., XI, 287; XII,
673; XIII, 190, 301
- Toenjes, W., XII, 129; XIII,
(727); XIV, 107
- Toft, C. R., XIII, 580
- Tohir, K. A., XI, 962
- du Toit, J. J., XII, 517
- du Toit, M. S., XII, 58; XIII,
1224; XV, 73
- du Toit, R., XII, 1330
- Tokin, B., XIV, 1307; XV, 558
- Tolbert, N. E., XIV, (412)
- Tolk, J. G., XV, (432)
- Tollenaar, D., XI, 1385
- Tolmačev, A. I., XIV, 1395
- Tolman, B., XI, (1235); XIV,
1212
- Tolman, W., XIII, 299
- Tomalin, T. E., XV, (83)
- Tomeo (Ibarra), H. P., XII,
(1142); XIII, 538
- Tomes, M. L., XIV, 505
- Tomkins, R. G., XV, 904
- Tomlinson, F. R., XI, (737)
- Tomlinson, W. E., Jr., XIV, 1632
- Tompkins, C. M., XI, 835, (1266);
XV, 768
- Tooke, F. G. C., XV, (599)
- Toole, E. H., XIII, 134; XIV,
1727
- Topper, B. F., XIII, 297
- Torčikov, I. I., XIV, 175
- de Torrejón y Boneta, A., XV,
(1018)
- Torres, J. P., XI, (1506)
- Torres, P. E., XI, 1486; XII, 308,
(691)
- Torrle, J. H., XIV, 181
- Toth, S. J., XIII, (1182)
- Tothill, J. D., XI, 318
- Tottingham, W. T., XI, 1223
- Tow, A. J., XI, (501)

AUTHOR INDEX

- Townsend, G. R., XI, (1268); XV, 704, 706, (758)
- Toy, L. R., XV, 1975
- Tracy, P. H., XII, 1102
- Traske, C. G., XIII, 441
- Traub, H. P., XI, 880, (965); XIII, 34; XIV, 1723
- Travers, F., XV, 309
- Trehan, K. N., XIV, (161)
- Trelles, J. B., XIV, 467
- Trenkle, R., XI, 388; XIV, 55, 499, 1052; XV, 1453
- Treschow, C., XV, 754, 756
- Tressler, C. J., Jr., XIV, 1418; XV, 906
- Tressler, D. K., XI, (131), 289, 290, 1451, 1465, 1491, 1493; XII, 1121; XIII, 652; XIV, 1416, (2003); XV, 900
- Trias, S., XII, 550
- Tribe, E. R., XIII, (770)
- Triebold, H. O., XIV, 705
- Trifonova, P. S., XIII, 1035
- Trinidad and Tobago Department of Agriculture, XII, 1160; XIII, (347); XIV, 424
- Trinidad, Imperial College of Tropical Agriculture, XII, 335, 1161; XIII, 668; XIV, 1449; XV, 1364, (2082)f
- Tripp, E. H., XII, 1166
- Tritt, A., XIV, (458)
- Trofimov, T. T., XV, 1531
- Trosko, I. K., XI, 903
- Trout, S. A., XI, 611; XII, 1103; XIV, 1937, 1947; XV, 1303, 2003
- Trucco, S. E., XIV, 433
- Trumble, H. C., XIV, 977, 1110
- Trumbull, H. L., XIII, 499
- Truninger, E., XIV, 1072, 1198
- Truog, E., XII, 821; XIV, 449
- Truscott, J. H. L., XV, 2008, (2059)g
- Trussevich, G. V., XII, 798
- (v. Tschermak-Seysenegg, E.), XIV, 214
- v. Tschermak-Seysenegg, E., XIV, 815
- Tscherniak, A., XII, 1557
- Tschudy, R. H., XV, (431)
- Tschumi, L., XIV, 1096
- Tsiang, Y. S., XIV, 445
- Tsu, S. T., XII, 297
- Tsakamoto, Y., XI, (291)
- Tuba, J., XIV, 820, 1394; XV, 890, 891
- Tucker, C. M., XI, (1266); XV, 768, 1173, 1848
- Tucker, L. R., XI, 994
- Tucker, R. W. E., XI, 182
- Tucumán Agricultural Experiment Station, XI, 649, 1523; XII, 721, 1583; XIII, 575; XIV, 1316, 1450; XV, 1365
- Tuft, P. H., XIV, 1646
- Tufts, W. P., XIV, 1147; XV, (505)
- Tuker, G., XIV, 525
- Tukey, H. B., XI, 706, 708, (737), 1091; XII, 51, 52, 1194, 1240; XIII, 54, 57, 390, 1171; XIV, 1054, 1496, (1545), 1596; XV, 457, (505), 581, 1432, 1490
- Tulloch, W. J., XV, (1185)
- Tunblad, B., XIII, 1323; XIV, 234; XV, 244
- Tunstall, A. C., XIII, 275
- Turezkaja, R., XIII, 382
- Turezkaja, R. H., XIV, 453; XV, 170
- Turk, L. M., XIV, 9
- Turkova, N., XIV, 259
- Turlapova, A., XV, 1114
- Turnbull, J., XIII, 406; XV, 1009
- Turner, C., XIV, 1721; XV, 345
- Turner, H. A., XV, 1530, (1853)j
- Turner, N., XIII, 1348; XIV, 672, (1662)
- Turner, P. E., XI, (1054); XII, (273)
- (Turner, P. E.), XIII, (672)
- Turnipseed, G. F., XI, 1330; XIV, 1809
- Turrell, W. T., XIV, (412)
- Turrill, F. M., XI, 889, 1308; XIII, 251, (260), 1320, 1483; XIV, 843, (1476), 1821; XV, (431), (1658)k
- Turry, H. B., XII, 221
- Turton, A. G., XII, 151; XIII, 556
- Tusnjakova, M., XV, 658
- Tydemann, H. M., XI, 778, 1102; XIII, 1164; XIV, (1476), 1484, 1503; XV, 1396
- Tyner, L. E., XV, 1793
- Tyson, J., XII, 199
- United States Department of Agriculture, XI, 1123; XII, 314, 1572; XIII, (139), 313, 338, (347); XIV, (1455), 2015
- (United States Department of Agriculture), XIII, 312
- United States Department of Agriculture, Bureau of Entomology and Plant Quarantine, XII, 468, (880)
- (United States Department of Agriculture Forest Service), XIII, 1540
- United States, North-Eastern States, Fruit tree workers, XI, 43
- Unkles, W., XV, 247
- Unrau, J., XIII, (947)
- Uphof, J. C. T., XIII, (115)
- Uphof, J. T., XI, 539
- Uppal, B. N., XV, 853
- Upshall, W. H., XI, 1289; XII, (1226); XIII, 747, 756, 1165; XIV, 67, 1051; XV, 1436, 1437, 1445, 1461, 1464, 1485, 1486, (1493)d, 1527
- Usatov, S. P., XIII, 1146; XIV, 20
- Ustenko, G. P., XIII, 479
- Uys, C. J., XI, 683
- Vachhani, M. V., XV, 297, 813
- Vageler, P., XIV, 329
- Vagholkar, B. P., XI, (248)
- (Vahl, E.), XV, 481
- Vahl, I., XIII, 689
- Vaile, J. E., XII, 44; XV, 1509, 1521
- Vajic, B., XIV, 1964
- Valdés, R. R., XI, 591
- Vallance, L. G., XIV, 780
- Valle, E. L., XV, 822
- Valle Arribas, J., XV, 1707
- Valleau, W. D., XI, 1282; XII, (462), (532); XIII, (231), (893); XIV, 1219, 1220; XV, (758)
- Vandecaveye, S. C., XIII, 65
- Vanderplank, F. L., XV, (1658)t
- Vanderweyen, R., XIII, 613, 614, -615; XIV, 1366, 1924
- Van Geluwe, J. D., XIII, 1256; XIV, 1537, (1545)
- Vanin, I. I., XIII, 431; XIV, 151
- Vanneck, C., XIV, 1925
- Vansell, G. H., XIII, 51, 547
- Vanselow, A. P., XIV, 304; XV, 418, 419
- Varada Rajan, B. S., XIII, (1553)
- Varentsov, I. J., XIII, 1149
- Vargas, C. C., XIV, (673)
- Varma, S. R., XI, 1415
- Vasconcellos, P. W. C., XV, (774)
- Vasiljev, A. V., XV, 263
- Vasiljev, F. N., XI, 1311
- Vasiljkov, B. P., XIV, 1295; XV, 755
- Vaškulat, P. N., XIII, 1388
- Vassiliev, I. V., XII, 1434
- Vassilieva, N. G., XII, 1179, 1180

AUTHOR INDEX

- Vasudeva, R. S., XII, 1094; XV, 731
- Vaughan, E. K., XIV, 265, 1277; XV, 210
- Vaughan, P. J., XIII, 1047; XV, 877
- Vaughn, R., XIII, 327
- Vaughn, R. H., XIII, 1612
- Veale, P. T., XV, 403
- van de Vecht, J., XI, (248)
- Veen, A. G., XI, 960
- van der Veen, R., XI, 176, 576, 925, 927; XII, 1028, (1518)
- Veihmeyer, F. J., XII, 33, 66, 825, 1254; XIII, (375); XIV, 1976
- Vélez, M., XI, 206
- Veldhuis, M. K., XIV, 1047, 1946, 1982, 1986
- (Veldstra, H.), XIV, (193)
- Velikanov, V. A., XV, 1786
- Venegas, F. G., XI, (1395)
- Venezuela, XIII, 574, 669
- Verbeek, F. A. Th. H., XII, (618), 644
- Verdoorn, F., XV, 2069
- Vergani, A. R., XIV, 311, 850
- Verma, S. R., XIII, 1027
- Vermaat, J. G., XII, (659), (1095)
- Verner, L., XIII, (159); XV, 1424, 1458, (1535)e
- Vertogradova, O. N., XIV, 136
- Veselovskaya, K. A., XII, 1444
- Vesey-Fitzgerald, D., XI, 594, 595
- Vesselovsky, I. A., XI, 782
- Vestal, A. G., XV, 30
- Vestal, P. A., XV, (431)
- Vianna, E. F., XV, (865)
- Vickery, H. B., XI, 1084
- Victoria, Aust., Department of Agriculture, XII, 162
- Victoria, Aust., Horticultural Division and Chemist's Branch, XII, 1000
- Viégas, A. P., XIII, 586
- Vilbrandt, F. C., XIII, 650
- Viljoen, N., XIV, 1523
- Viljoen, N. J., XI, 55
- Viljoen, P. R., XII, (720); XIII, 1634; XIV, 1448; XV, 1362
- Villela, G. G., XIV, 1401
- Villforth, F., XIII, 1576
- Villiers, A., XV, (1298)
- de Villiers, D. J. R., XII, 1554
- de Villiers, G. D. B., XI, 1112; XII, 59; XIV, 1033; XV, 37
- de Villiers, J. I., XII, 1468
- Vincent, C. L., XIV, 1760; XV, 76
- Vincent, V., XV, 1844
- Vine, H., XI, (965); XIII, (287), (601), (1016)
- Vineland Horticultural Experiment Station, XI, 1050, 1525; XIII, 670
- Vinet, E., XV, 1524
- Vining, H. W., XV, 1059
- Vinson, C. G., XIII, 639
- Vinson, L., XII, 1045
- Vinson, L. J., XV, 2026
- Vinzant, J. P., XII, 1539
- Virgin, W. J., XIV, 270
- Virta, A. A., XV, (758)
- (Viswanath, B.), XIV, 348
- Viswanath, B., XIV, (1476)
- Vitoria, E. R., XV, 1593
- Vitoria, J. C., XII, 1113
- de Viveiros, J. F., XV, 856
- van Vlack, C. H., XI, 15
- Vlams, J., XIV, (1030)
- Voblikova, T. V., XIV, 988
- Voelcker, O. J., XI, 208; XII, 628, 1041; XV, 1262
- Vogel, F., XI, 503, 504
- Vogel, O. A., XV, 1116
- Vogelmann, A., XI, 618
- Vogt, W. E., XII, (414)
- Volkani, R., XI, 467
- Völkens, W., XIII, 1569
- Vollema, J. S., XI, 577, 578; XII, 1057
- Volodin, A. P., XII, 1175
- Volotov, E. N., XII, (1412)
- Voorhees, R. K., XI, (872)
- Vorster, P. W., XIII, 456
- Voshchinin, P. K., XII, 1405
- Vovk, A. M., XV, 157
- de Vries, J., XI, 645
- de Vries, L., XI, 317
- Vyas, N. D., XIII, 1080
- Vyyyan, M. C., XI, 1126; XII, 1267; XIII, 1162, 1163, 1194; XIV, 1540; XV, 1488
- W., E. D. H., XIV, 1350
- W., H., XIV, 1036
- Wa, XI, (941)
- Waagen, H. K., XIII, 320
- de Waal, P. E., XI, 33
- Wacklerin, O., XV, 1558
- Waddell, D. B., XII, 877; XIII, 113
- Waddington, C. H., XII, 1171
- Wade, B. L., XIII, 221, 1048; XV, 539, (1185)
- Wade, G. C., XV, 1190
- Wädenswil Versuchsanstalt, XI, 328; XII, 1162; XIV, 1451; XV, 944, 2079
- Wadham, S. M., XI, 7
- Wadleigh, C. H., XIII, (1454); XIV, 282, (834), 1281; XV, 666, 746, 1176
- Wadley, F. M., XIII, (1329); XIV, 156
- Wadsworth, C. K., XIV, 1997, 1998; XV, 1333
- Wadsworth, S. E., XII, 983
- Wager, V. A., XI, 154, 521, 865, 884; XIII, 253, 266; XV, 137, 744
- Wagle, P. V., XV, 853
- Wagner, A., XI, 502
- Wahlberg, H. E., XII, 213
- Wahlin, B., XIV, 679
- Wahlin, B. J. O., XIV, 548
- Waid, W. C., XI, 265
- Wain, R. L., XII, (1347); XIII, 122, 464, 937, 944; XIV, (635), 1644, (1662); XV, 121, 1649, 1765
- Wainio, W. W., XI, 1090
- Waite Institute, XII, 336; XIV, 1452
- Wakankar, S. M., XIV, (673)
- Wakefield, A. J., XIV, 1340
- Wakeland, C., XIV, (161); XV, 1629
- Wakeman, A. J., XI, 1084
- Waksman, S. A., XV, 463
- Waldo, G. F., XI, (1137); XII, (411); XIV, 1567
- Waldsburger, J., XIV, 1097
- Walker, C., XV, 580
- Walker, E. A., XIV, 1133; XV, (596)
- Walker, G., XII, 1043
- Walker, H. B., XIII, 213
- Walker, H. G., XIII, 473, 1350, 1451; XIV, 1781, 1782
- Walker, J., XV, (1493)c
- Walker, J. C., XI, 807, 1212, 1243, (1244); XIII, 505, 506, 1408; XIV, 269, 451, (635), 1259; XV, (598), 690, 1101, 1774, (1853)k
- Walker, M. N., XIII, 924; XV, 708, 1789, 1790
- Walker, W. F., XI, 1133; XII, 1360; XV, 1800, 1805
- Walkley, A., XIV, 1029
- Wall, M. E., XIII, (375); XV, 1315
- Wall, R. F., XIII, 207
- Wallace, A., XIV, 1113
- Wallace, E. R., XI, 830; XV, 1827
- Wallace, G. B., XII, (659); XIV, 897, 1884
- Wallace, J. C., XI, 97, 98; XII, 139, 518, 917; XV, 1759
- Wallace, J. M., XI, 129; XIV, 309, 1278; XV, 208, 253, 1890
- Wallace, M. M., XIV, 1884
- Wallace, P. P., XV, (599)
- Wallace, R. H., XI, (1073)
- Wallace, T., XI, 722, 785, 786, 1113; XII, 910, 911, 912, 913, 928, (929), 959; XIII, 748, 799, 803, 872, 914, 919, 1089; XIV, 1771; XV, 92, 530, 549, 923, 1080
- Waller, C. W., XIV, 1292
- Wallis, R. L., XIV, 1794
- Walls, E. P., XIII, (227); XIV, 1284
- Walls, L. P., XII, 1522
- Walsh, T., XIII, (1138), 1178, 1429; XV, 1170
- Walsh, T. J., XIV, (528)
- Walter, H., XIII, 704, 1486; XIV, 2, 431
- Walters, D. V., XII, 834, 837, 841; XIII, 811
- Waltman, C. S., XII, 399; XIII, (1138); XV, 1476
- Walton, C. L., XII, (982)
- Walton, G. P., XIV, 69
- Walton, R. R., XIV, 1752
- Wander, I. W., XIV, 74
- Wang, Y., XIV, 1522
- Wang, Y. L., XV, 398
- Warburg, J. B., XV, 1651

AUTHOR INDEX

- Ward, G. M., XII, 693, 938
Ward, K. M., XV, 1548
Ward, W. F., XII, 584
Wardlaw, C. W., XI, 544, 598, 957, 981, 1434, 1457; XIII, 291; XIV, 324, 429
Ware, L. M., XIII, (877), (1358); XIV, (1803)
Ware, W. M., XI, 816; XII, 1397; XIII, 477; XIV, 254, 785, 1789; XV, 214, 1172
Waring, J. H., XI, 710; XIII, 383
Warrington, K., XII, 499
Warmke, H. E., XV, (431), 1131
Warne, L. G. G., XI, 723; XII, 525, 702, 1456; XIII, 28, 237, 354, 681; XIV, 235
de la Warr, The Earl, XIV, 1206
Warren, A. L., XIV, 1878
Warren, G. H., XI, 1156
(Waschneck, A.), XIV, 125
Washington Agricultural Experiment Station, XI, 1051, 1052; XII, 128, 1324; XIII, 671, 1098; XV, 945, (1366)
Wason, E. J., XV, 1895
Wasserman, J. W., XV, 1107
Watanabe, S., XII, 179
Waterbury, E., XV, 996
Waters, E. F., XII, 71
Waters, H. B., XIV, 1879
Waterston, J. M., XII, 246; XIV, 1818; XV, 302
Watkins, J. V., XI, 1290, 1337; XV, (774)
Watkins, T. C., XIV, (729), 790, 1737
Watkins, W. G., XIII, 547
Watkins, W. R., XIII, 137
Watson, D. J., XIII, (947)
Watson, E. V., XIII, 1127
Watson, J. A. S., XII, (367)
Watson, J. R., XV, (599), 611, (758), 773, (1995)g
Watson, M. A., XIII, (231)
Watson, R., XI, 498
Watson, R. D., XV, (598)
Watson, R. W., XIII, 6, (690); XIV, (412)
Watt, A. S., XI, (441); XIV, (1662)
Watt, J. H., XV, 1498
Watts, B. M., XI, 311
Waugh, J. G., XI, (737); XII, 1238
Weast, C. A., XII, 296
Weaver, B. L., XV, 265
Weaver, J. G., XII, (1460)
Weaver, L. E., XII, 115
Weaver, L. O., XIII, 1272
Weaver, L. R., XIV, (458); XV, 399
Weaver, R. J., XII, (520)
Webb, L. W., Jr., XI, 350, 668
Webber, H. J., XI, 139; XIII, 1545; XIV, 946, 1836; XV, 850, 1228
Webber, J. M., XI, 653
Weber, A., XIII, 419
Weber, A. L., XIII, 1313; XIV, 150, 1679
Weber, G. F., XI, (1266); XV, (599), (758)
Weber, U., XIII, (267)
Webster, C. C., XI, 164, 532, 898; XII, 1487; XIV, 862; XV, 804
Webster, G. T., XV, 1828
Webster, R. E., XIV, 1756
Webster, R. L., XI, 433; XII, 867, 951; XIII, 435; XV, 1054
Weddell, J. A., XV, 305
Wedmore, E. B., XI, 392
Weedon, F. R., XI, 376
Weger, N., XI, 361, 393; XIV, 1507
Wehlmann, —, XII, (500)
Wehlmann, K., XIV, 222
Wehnelt, R., XV, (1658)g
Wehrmann-Ebstorf, O., XIV, 1589
Weibel, R. O., XV, 651
Weidhaas, H., XIV, (1298)
Weier, E., XIV, 1979
Weier, T. E., XV, 331, 887
Weigel, C. A., XIV, 620
van der Weij, H. G., XI, 554, 555
Weil, J. W., XII, 458
Weimarck, H., XIV, 488
Weinberger, J. H., XV, 452, 453
Weintraub, R. L., XIV, 1469
Weise, M., XIV, (635)
Weise, R., XIII, 782
Weiss, F., XII, 984, 987
Weiss, F. E., XI, 17
Weiss, M. G., XIV, 274
Welker, E. L., XIV, (1476)
Weller, R. A., XIV, 408
Wellington, R., XI, 792; XIV, (1545)
Wellman, F. L., XI, 815; XIII, 213, 934; XIV, (268), 784; XV, 1234
Wellman, R. H., XIV, (635); XV, (598)
Wells, J. G., XI, 802
Wells, S. P., XII, 957; XIII, 185; XIV, 242, 734
Welsh, M. F., XIII, 104; XV, 96
Welton, F. A., XII, 199
Weltz, J., XIII, 1333
Wendland, R. T., XI, (1506)
Wendt, H., XV, 1678
Wene, G., XV, 1180
Wenger, R., XI, 1069
Went, F. W., XI, 359; XII, (513), 753, (765); XIII, 523, 678, 849, 941; XIV, 994, 1763; XV, (432)
Wenzl, H., XIV, 555
Werkman, C. H., XII, (462)
Werner, H. O., XI, (1229); XII, 919, (1390)
Werner, R. R., XII, (1412)
Werth, A. J., XIV, 164
Wessels, P. H., XV, (758)
West, A. P., XI, (1506)
West, C., XII, 666; XIV, 1961
West, E., XV, (1914)g
West, E. A., XI, (1238)
West, J., XII, 628, 1041; XIII, 598; XV, 1269
West, N., XI, (641)
West, P. M., XI, 1166, 1167
West, T. F., XV, (128), (1071)
West African Agricultural Officers, XI, 329
Westas, J. J., XIII, 470
Wester, R. E., XIII, 25; XIV, 252
Western, J. H., XIV, 777
Western Nut Growers Association, XV, 941
Western Regional Research Laboratory, Albany, California, XIV, (945); XV, (911)
West Indian Limes Association, XI, 1302
Weston, W. A. R. D., XII, 921; XIII, 19, 1447; XIV, 1791; XV, 1034, 1156
Westover, K. C., XI, 1219, 1255; XIII, 1424
(West of Scotland Agricultural College), XV, 537
West Virginia Agricultural Experiment Station, XIII, 346, 1637
de Wet, A. F., XI, 44; XIV, 1044, 1060, 1490; XV, 53, 473
Wetmore, R. H., XII, 62
Wetmore, T. H., XIV, 296
Wetzel, A., XI, 110; XIV, 100, 649
Whaley, W. G., XV, 31
Whalley, H. K., XIII, 370
Wheeler, E. H., XV, 1623, (1658)z
Wheeler, E. J., XV, 621
Wheeler, K., XI, 290
Wheeler, K. A., XIV, 1988
Wheeler, K. E., XII, (548)
Wheeting, L. C., XI, (1092); XIII, 65, 953
Whelan, L. A., XI, 579, 1407, 1408; XII, 1050; XIII, 1022, 1023; XIV, 1355, 1356; XV, 1957, 1962
Whelton, R., XIV, 373
Whetstone, R. R., XII, 747
Whinnett, S., XII, 1, 362
Whipple, O. C., XI, 807; XII, 511
Whitacre, J., XIV, (2003)
Whitacre, W. R., XII, 274
Whitaker, T. W., XIII, 921
Whitcher, E. J., XV, 1691
Whitcomb, W. D., XIV, 1632, 1743
(White, A.), XIV, 1359
White, C. T., XIV, 364
White, D. G., XIII, 55; XV, 417
White, E. P., XIV, 225, 1239
White, N. H., XIII, (1358); XIV, 1244, 1595, 1793; XV, 1754, 1819, 1846, (1853)l
White, O. E., XV, 964
White, P. R., XI, 18, 340; XII, (18), 738; XIII, (697), 1427; XIV, 414; XV, (1659)a
(White, P. R.), XIII, 3; XIV, 128
White, R. O., XV, 966
White, W. H., XII, 879; XIV, 1109
Whitehead, F. E., XIV, 1752
Whitehead, G. E., XII, 1567, 1568; XIV, 2014; XV, 2070

AUTHOR INDEX

- Whitehead, M. R., XI, 5, 343, 1063; XIII, 522; XIV, 229
- Whitehead, T., XI, 104; XII, 116; XIII, (874)
- Whitehouse, W. E., XII, 95; XIV, (115)
- Whitelaw, E. W., XII, 1051
- Whitemore, R. A., XV, 745
- Whiteside, G. B., XV, 488
- White-Stevens, R. H., XII, 470, 471, 496, 1376; XV, (758)
- Whitfield, C. J., XIII, (374)
- Whiting, A. G., XIV, 1007; XV, 665, 671, 1129, 1402
- Whitnall, A. B. M., XIV, 628
- Whittaker, E. C., XI, 39, 40, 620, 1154, 1449; XII, 374; XIII, 47, 381, 1555, 1556; XIV, 522; XV, 435
- Whitten, R. R., XII, (462)
- Whyte, R. O., XV, 33
- Wiant, J. S., XII, 907; XV, 1795
- Wickham, R. D., XV, 1456
- Widmer, A., XIV, 937, (2003); XV, 346, 2014, (2060)f, (2060)g, (2060)h, (2060)i
- Wiederhold, E., XIV, 1989, 1995; XV, 1312
- Wiegand, E. H., XI, 307, 1474
- Wiehe, A., XII, 1015
- Wiehe, P. O., XI, 952; XII, 1516
- Wienhues, W., XIV, 7
- Wiesmann, R., XII, 461; XIII, 1289; XIV, 116, 549, 624, 625, 1152, 1157, (1184); XV, 1605
- Wiggins, I. L., XIII, 835
- Wigglesworth, A., XIII, 1008
- Wigglesworth, V. B., XIV, 622
- Wijnhamer, P. T., XII, (259)
- Wikström, H., XV, 1656
- Wilcox, A. N., XIII, 773
- Wilcox, J., XIV, 791
- Wilcox, J. C., XI, 403, (695); XII, 65; XIII, 1038; XV, 977
- Wilcox, L. V., XV, (227)
- Wilcox, M. S., XIII, 428; XIV, (635)
- Wilcoxon, F., XI, 1196
- Wilde, E. I., XII, 195; XIII, (245)
- Wilde, S. A., XIII, 63
- Wildman, S. G., XIII, (367)
- Widson, C. E., XV, 1690
- Wilford, B. H., XV, 420
- Wilhelm, A. F., XIV, (635)
- Wilk, I., XIII, 408
- Wilke, S., XII, 1136
- Wilkins, E. G., XIII, 1617
- Wilkinson, E. H., XII, 858, 1316; XIII, 122, 464, 937, 944, 1275, 1316; XIV, 132, (635), 1606; XV, 563
- Wilkinson, H., XII, (311)
- Wilkinson, T., XII, (1333)
- Willaman, J. J., XV, 1313
- Willcox, O. W., XV, 26
- Williams, C. F., XI, 59
- Williams, C. H. B., XIV, 1921
- Williams, E. G., XII, 1361
- Williams, E. M., XI, (1073); XIII, (375)
- Williams, H. A., XIII, 417
- Williams, H. H., XIV, 1807
- Williams, J. L., XI, 629; XV, 2040
- Williams, L., XII, 593, 1021
- Williams, P. H., XIII, 1437, 1438, 1440
- Williams, R. F., XIII, 22; XV, 625
- Williams, R. J., XIV, 1406
- Williams, R. O., XII, 269; XIII, 1543; XIV, 1364
- Williams, T. L., XI, 188
- Williams, W., XV, 112
- Williams, W. O., XII, 29; XV, 1526
- Williamson, A. L., XIV, (1803)
- Williamson, C. E., XII, 987
- Willmott, S. G., XI, 897
- Willis, L. G., XIV, 950; XV, 924
- Willson, R. S., XI, 1452; XIV, 583, 1945; XV, (599)
- Wills, J. M., XV, 1216
- Willson, K. S., XIV, 371
- Wilmot, R. J., XV, (758), (774), 1947
- Wilsch, L., XIV, 172
- Wilshaw, R. G. H., XI, 1427; XII, 264
- Wilsie, C. P., XIV, 201
- Wilson, A., XI, 573
- Wilson, C. L., XIV, 15
- Wilson, C. W., XI, 631
- Wilson, E. E., XII, 1309; XIII, 108, 1280, 1315; XIV, 134, (547)
- Wilson, F., XIV, 610
- Wilson, F. B., XV, 811
- Wilson, G., XV, (1493)d
- Wilson, G. F., XI, 94; XII, 418, 868; XIII, 462, 530, 875, 1402; XIV, 586, 658, 1815; XV, 683, 1755
- Wilson, H. F., XV, (1071)
- Wilson, H. K., XIV, 1633
- Wilson, J., XII, 484, (1279), 1356; XIII, 453
- Wilson, J. B., XIII, (1620); XIV, (1431)
- Wilson, J. D., XIV, (547); XV, (598)
- Wilson, J. K., XIII, 696; XIV, 1475; XV, 218
- Wilson, J. P., XV, 974
- Wilson, J. W., XV, 773
- Wilson, R. H., XIII, 330
- Wilson, R. W., XIII, 493
- Wilson, S. G., XII, (595)
- Wilson, W. K., XII, 1558
- Wilson, Y., XIV, 916
- Wimbush, S. H., XI, 543, 905
- Wingard, S. A., XII, 106; XIV, 1577
- Wingfield, J., XIV, 103
- Wine Institute, XIII, 661
- Wingo, C. W., XII, 455, 1326
- Winklepleck, R. L., XI, 657
- Winkler, A. J., XI, 1463, 1464; XII, 1278; XIV, 536
- Winston, J. R., XI, 843, 853; XIV, (1875)
- Winter, H. F., XV, (598)
- Winter, J. D., XII, (288), (1536); XIII, 1602; XV, 1307
- Winters, J., XI, 268
- Wirth, A. G., XIV, (92)
- Wisconsin College of Agriculture, XII, 883
- (Wisconsin State Horticultural Society), XIV, 1453
- Wisecup, C. B., XIV, 666
- Wissing, P., XI, 292
- Wit, F., XI, 964
- Withrow, A. P., XIII, 682, (947); XIV, 987, 1289
- Withrow, R. B., XI, 679; XIII, 682, (947); XIV, 987; XV, 1693
- Withrow, W. A., XII, (833)
- Witkus, E. R., XV, (1853)m
- v. Witsch, H., XIV, 438
- Wittenkamp, R., XIII, 63
- Wittkorn, T. H., XII, 509
- Wittwer, S. H., XII, 1185; XIV, 12, 1747, 1785; XV, 722, 1679
- Woglum, R. S., XII, 1475; XIII, 979; XIV, 844; XV, 258
- Wohl, K., XIII, 679
- Wokes, F., XIII, 331, 638; XIV, 407, 1960; XV, 323, 2025
- Wolcott, G. B., XI, 660
- Wolf, B., XI, 25; XII, 1443; XIV, 1009
- Wolf, E. A., XIII, 196
- Wolf, J., XII, 490, 491; XIII, 39, 1049; XIV, 923
- Wolfe, A. C., XI, (131); XII, (982)
- Wolfe, H. S., XI, (887), 1225, 1348; XV, 1910, 1975
- Wolfe, W. C., XII, (1347)
- Wolfenbarger, D. O., XV, (598)
- Wolff, J., XI, 471; XII, 784
- Wollenweber, H. W., XII, 1371
- Wolodkewitsch, N., XIV, 523
- Wong, C. Y., XII, 168
- Wood, C. A., XII, 116; XIII, 1587
- Wood, H. G., XII, (462)
- Wood, J., XI, 136, 829; XII, 487; XV, 243
- Wood, J. F., XI, 1303
- Wood, J. G., XII, (752); XIII, 691
- Wood, L. K., XIII, (1182)
- Wood, R. C., XI, 546
- Woodbridge, C. G., XII, 104; XIII, 1038
- Woodbury, G. W., XIII, 510; XIV, 1729; XV, 1458
- Woodcock, A. H., XIV, (19)
- Woodford, E. K., XI, 558
- (Woodford, R. C.), XV, 276
- Woodgate, G. B., XII, 361
- Woodin, M. D., XII, 41, (829)
- Woodman, H. E., XIII, (1138)
- Woodman, R. M., XI, 95, 463, 1242; XII, 962, 1425; XIII, 909, 1396; XIV, 646, 724, 731, 810; XV, 680
- Woodmansee, C. W., XIV, (1431)
- Woodroof, J. G., XI, 1453, 1454; XIII, 1042, 1043, 1084
- Woodruff, S., XI, 973

AUTHOR INDEX

- Woods, J. J., XIII, 404; XV, 991
Woods, M. W., XII, (532); XIII, (231), (487), (1265); XIV, (161)
Woodside, A. M., XI, (1192); XV, 1616, 1620, 1632
Woodward, O., XV, (526)
Woodworth, C. E., XIII, (1307)
Woodworth, H. C., XII, 1215
Woodlridge, W. R., XII, 698, (779), 1569
Woolley, D. W., XIII, (702)
Woolley, F., XIII, 1000
Woolley, R., XIV, 319
Wooster, J. L., XIII, 1001
Work, P., XV, 679
Work, R. A., XI, 691
Worley, C. L., XI, (1067)
Worlock, R. F., XI, 371, 1144; XII, 375, 433
Wormald, H., XI, 76, 1146, 1162, 1163, 1171; XII, 118, 857, 950, 1302, 1307, 1310, 1312, 1314; XIII, 1269, 1273, 1279; XIV, 584, 1600, 1607; XV, 100, 101, 562, 1032, 1568, (1659)b, (1659)c, (1659)d
Wortheley, H. N., XI, 777, 1190; XII, 454, 1346; XIII, 443
Worthen, C. T., XIV, 516
Wright, C., XIV, 1250
Wright, D. W., XIII, 183, 861; XIV, 726, 727
Wright, E., XV, (1071)
Wright, J., XI, 209
Wright, K. E., XIV, 444
Wright, L. E., XII, 407; XIV, 1671
Wright, P. H., XIII, 777
Wu Chien-chi, XIV, 1317
van Wyk, G. F., XI, 257, 274, 524
van Wyk, S. P., XI, (737), (740)
Wynd, F. L., XIII, (487), 952, 1260; XIV, 1025

Yagodkina, V. P., *see* Jagodvina
Yakovlev, *see* Jakovlev
Yarbrough, M., XI, 61
Yarnell, S. H., XI, 848; XII, (1480); XIII, (541), (1138); XV, 454
Yarwood, C. E., XII, 889; XIII, 915; XIV, 618, 619, 1471; XV, (597)
Yates, F., XII, 915; XIV, (1476)
Yates, H., XIII, (1358)

Yeager, A. F., XI, (1092); XIII, 1306; XIV, (1545); XV, 428
Yee, J. Y., XIV, (1476); XV, (1406)c
Yerkes, G. E., XI, 132, (737)
Yi-Lung Liu, XI, 125
Yin, H. C., XI, 541
Yip, J. S., XI, 1201
York, G. T., XV, 1745, 1746
Yothers, M. A., XI, (1187); XII, 451; XIII, 434; XIV, 1628; XV, 576, 1049, (1071)
Young, A. H., XV, 1266, 1267
Young, G. A., XV, 2020
Young, G. Y., XIV, 131
Young, H. A., XII, 1129
Young, H. C., XV, (598)
Young, H. C., Jr., XIII, 533
Young, H. Y., XIV, 899, (1370)
Young, J. O., XIII, 54; XIV, 255
Young, J. R., XIV, (945)
Young, P. A., XI, 1264; XII, 977, (1347); XIV, 657
Young, P. F., XV, 1066
Young, R. A., XV, 1901
Young, R. E., XV, 1801
Young, T. R., Jr., XII, 230
Younkin, S. G., XV, 739
Yu, T. F., XIV, 1795
Yuncker, T. G., XII, 1018
Yust, H. R., XII, 1479; XIII, 558, (562); XIV, 312, (858), 1843, 1844, 1845

Žäch, C., XIII, 1310, 1168
Zač, V. K., XIII, 380; XIV, 474
Zaets, V. K., XII, 371
Zaharjjanc, I. L., XIV, 1888
Zaharov, B. S., XIII, 495, 496; XIV, 1228
Zaiceva, A., XV, 675
Zakharov, *see* Zaharov
Zaky, Y. A. H., XIII, (1454)
Zaldastishvilli, S. G., XI, 919
Zalensky, O. V., XII, 1178
Zaliwski, S., XIV, 1116
Zamith, A., XV, (865)
Zamjatnin, B. N., XV, 239
Zanotti, M., XIII, 160
Zanzibar Department of Agriculture, XI, 1053; XII, 1163; XIV, 425, 1454, 2028
Zarger, T. G., XIV, 1563
Zarow, A. I., XV, (1336)
Zasjadnikov, T., XII, 1062
Zasyppkin, A. S., XII, 906

Zaumeyer, W. J., XII, 980; XIV, 798, (799), 1784, 1787; XV, (227), 1833
Zavoronkov, P. A., XIII, 1152
Zazhurilo, V. K., XII, 1446
Ždanova, L. P., XII, (765); XIII, 15; XIV, 995
Zechmeister, L., XI, 1248; XII, (513)
Zeck, E. H., XIII, 1057
Zehner, W. H., XV, 1066
Zelenskaya, N. I., XI, 1346
Zelenskii, M., XII, 97
Zelenskij, M. A., XIII, 739
Zeller, A., XII, 539
Zeller, S. M., XI, 1158; XII, 115; XIII, (101), 814, 821; XIV, 570, (635); XV, 597, 1025
Zembrovskii, I. M., XIV, 462, 699
Zentmyer, G. A., XIII, 802; XV, (598), (599)
Zerfoss, E., XV, 140
Zerling, V. V., XIII, 14
Zetek, J., XIV, 868
Zhdanova, L. P., *see* Ždanova
Zhurbicki, Z. I., *see* Žurbiski
Zielinski, Q., XIV, (1662)
van Zile, L. G., XII, 102
Zillig, H., XIII, 922
Zilva, S. S., XIV, 1961
Zimmerman, G. A., XI, 1097
Zimmerman, P. W., XI, 1065; XII, 7, 1182, 1223; XIII, 365, 366, 1121, 1125; XIV, 85, 1003; XV, 423, 424, (431), 721, 1401, (1406)j
Zimmerman, W. I., XI, (131), 1491
Zimmermann, —, XII, (414)
Zippelius, H., XII, (826); XIII, (770)
Znamenskii, I. E., XIV, 508
Znobrist, L., XIV, 1145
Zogg, H., XIV, 1145; XV, 1734
Zohary, M., XIII, 1002
Zonn, S. V., XIV, 1266
Zorin, F. M., XI, 1310; XII, 203, 992
Zotov, V. D., XIV, 225
Zscheile, F. P., XI, (1092); XII, 15, (752); XIII, 1128; XIV, 1963
Zuck, R. K., XV, 747
Žurbiski, Z. I., XIV, 176
Zulauf, H., XIV, (110)
Züllig, E., XV, 2014
Zweede, J. C., XI, 213
Zweigelt, F., XIV, (597), (635)
Zykov, D., XV, 1674



IMPERIAL BUREAU OF HORTICULTURE
AND PLANTATION CROPS

HORTICULTURAL ABSTRACTS

Issued quarterly by the Imperial Bureau of Horticulture and Plantation Crops, East Malling, Kent, England. Price 25/- a volume of four numbers, single copies, 7/6. Concession price to subscribers ordering direct in Great Britain and other countries of the British Commonwealth of Nations 20/- a volume. Payments in sterling or at Bank of England rates of exchange.

IMPERIAL AGRICULTURAL BUREAUX

EXECUTIVE COUNCIL,

2 Queen Anne's Gate Buildings, London, S.W.1.

IMPERIAL BUREAU OF SOIL SCIENCE,

Rothamsted Experimental Station, Harpenden, Herts.

IMPERIAL BUREAU OF ANIMAL NUTRITION,

The Reid Library, Rowett Institute, Bucksburn, Aberdeen.

IMPERIAL BUREAU OF ANIMAL HEALTH,

Veterinary Laboratory, New Haw, Weybridge, Surrey.

IMPERIAL BUREAU OF ANIMAL BREEDING AND GENETICS,

King's Buildings, University of Edinburgh, Scotland.

IMPERIAL BUREAU OF PLANT BREEDING AND GENETICS,

School of Agriculture, Cambridge.

IMPERIAL BUREAU OF PASTURES AND FORAGE CROPS,

Agricultural Research Building, Penglais, Aberystwyth.

IMPERIAL BUREAU OF HORTICULTURE AND PLANTATION CROPS,

East Malling Research Station, East Malling, Kent.

IMPERIAL BUREAU OF AGRICULTURAL PARASITOLOGY (HELMINTHOLOGY),

Winches Farm, Hatfield Road, St. Albans, Herts.

IMPERIAL FORESTRY BUREAU,

39 Museum Road, Oxford.

IMPERIAL BUREAU OF DAIRY SCIENCE,

National Institute for Research in Dairying, Shinfield, Reading.

STAFF OF THE IMPERIAL BUREAU OF HORTICULTURE AND PLANTATION CROPS.

<i>Director</i>	R. G. HATTON, C.B.E., M.A., D.Sc., F.R.S.
<i>Deputy Director</i>	D. AKENHEAD, M.A., B.Sc.
<i>Assistants</i>	G. ST. CLAIR FEILDEN, B.A. V. H. GOLDSCHMIDT, Ph.D.

PUBLICATIONS STILL AVAILABLE, MARCH, 1945

HORTICULTURAL ABSTRACTS

Issued Quarterly since April 1931.

Annual Subscription, 25/-.* Single parts, 7/6. Back numbers available at same prices.

* 5/- less to subscribers in the British Commonwealth (other than trade) who send their subscriptions direct to Imperial Agricultural Bureaux, Central Sales Branch, Agricultural Research Building, Penglais, Aberystwyth, Wales.

SUBJECT AND AUTHOR INDEX TO HORTICULTURAL ABSTRACTS, Volumes I-X,
1931-1940, 1941, 25s.

TECHNICAL COMMUNICATIONS

2. FIELD EXPERIMENTS IN HORTICULTURE. 1931. *T. N. Hoblyn.* 2/-.
4. PROBLEMS OF FRUIT TREE NUTRITION. 1933. *Dr. T. Wallace.* 2/-.
5. THE "DEGENERATION" OF THE STRAWBERRY. 1934. *D. Akenhead, R. V. Harris, G. H. Berkeley, A. M. Massee.* 2/-.
6. THE NUTRITION AND MANURING OF SOFT FRUITS. 1936. *Dr. T. Wallace.* 2/-.
7. VEGETATIVE PROPAGATION OF TROPICAL AND SUB-TROPICAL FRUITS. 1936. *G. St. Clair Feilden and R. J. Garner.* 2/-.
8. HORTICULTURAL ASPECTS OF WOOLLY APHIS CONTROL, TOGETHER WITH A SURVEY OF THE LITERATURE. 1936. *R. M. Greenslade.* 2/6.
9. A REVIEW OF THE LITERATURE ON STOCK-SCION INCOMPATIBILITY IN FRUIT TREES, WITH PARTICULAR REFERENCE TO POME AND STONE FRUITS. 1937. *G. K. Argles.* 5/-.
10. PLANT INJECTION FOR DIAGNOSTIC AND CURATIVE PURPOSES. 1938. *W. A. Roach.* 5/-.
11. FRUIT JUICES AND RELATED PRODUCTS. 1939. *V. L. S. Charley and T. H. J. Harrison.* 5/-.
12. PLANT HORMONES AND THEIR PRACTICAL IMPORTANCE IN HORTICULTURE. 1939. *H. L. Pearse.* 3/6.
13. VEGETATIVE PROPAGATION OF TROPICAL AND SUB-TROPICAL PLANTATION CROPS. 1940. *G. St. Clair Feilden and R. J. Garner.* 3/6.
14. PROPAGATION BY CUTTINGS AND LAYERS. RECENT WORK AND ITS APPLICATION, WITH SPECIAL REFERENCE TO POME AND STONE FRUITS. 1944. *R. J. Garner.* 3/6.

OCCASIONAL PAPERS

1. TECHNIQUE IN POT CULTURE FOR FRUIT PLANTS. 1933. *Dr. T. Wallace.* 6d. (stencil).
2. EXPERIMENTAL DATA ON ORCHARD AND SMALL FRUIT MANURING. 1933. *S. T. Antoshin.* 1/-.
3. ANNOTATED BIBLIOGRAPHY ON BITTER PIT. 1934. 1/6.
6. HARICOT BEANS. 1941. *G. St. G. Feilden.* 1/-.

N.B.—Payment in sterling. If drafts in other currencies are sent, official or Bank of England rates only can be accepted.

IMPERIAL AGRICULTURAL BUREAUX

JOURNALS PUBLISHED BY BUREAUX ON RELATED SUBJECTS

Published by the

PLANT BREEDING ABSTRACTS	..	Imperial Bureau of Plant Breeding and Genetics, Cambridge.
HERBAGE ABSTRACTS	Imperial Bureau of Pastures and Forage Crops, Aberystwyth.
FORESTRY ABSTRACTS	Imperial Forestry Bureau, Oxford.
SOILS AND FERTILIZERS	Imperial Bureau of Soil Science, Harpenden.

Annual subscription for these journals is 25s. (with a special reduction of 20 per cent. for orders received direct from subscribers in Great Britain, the Dominions and Colonies).

RECENT AND FORTHCOMING OCCASIONAL PUBLICATIONS ON AGRICULTURE AND FORESTRY

I.A.B. JOINT PUBLICATIONS

No.		Price.
4.	CO-ORDINATED TRIALS WITH PHENOTHIAZINE AGAINST NEMATODES IN LAMBS. Imperial Bureau of Animal Health and Agricultural Parasitology. Pages: 56	3s. 6d.
5.	THE PRODUCTION OF SEED OF ROOT CROPS AND VEGETABLES. Imperial Bureau of Horticulture and Plantation Crops Pastures and Forage Crops, and Plant Breeding and Genetics. July, 1943. Pages: 92	3s. od.
6.	ALTERNATE HUSBANDRY. Imperial Bureau of Pastures and Forage Crops, Soil Science, Animal Breeding and Genetics and Animal Health. March, 1944	5s. od.
7.	IMPERATA CYLINDRICA: ITS ECONOMIC SIGNIFICANCE AND CONTROL. Imperial Forestry Bureau and the Imperial Bureau of Pastures and Forage Crops. March, 1944	2s. 6d.

TECHNICAL COMMUNICATIONS, ETC.

	Price.
IMPERIAL BUREAU OF PLANT BREEDING AND GENETICS, CAMBRIDGE.	
Sixth List of New and Promising Varieties. October, 1944	1s. od.
Bibliography on Insect Pest Resistance in Agricultural Plants. February, 1944	1s. 6d.
Photoperiodism in the Potato. October, 1943	2s. 6d.
Potato collecting expedition in Mexico and South America. II. Taxonomy and systematic classification of the collections. June, 1944	7s. 6d.
IMPERIAL BUREAU OF PASTURES AND FORAGE CROPS, ABERYSTWYTH.	
Bulletin 31. The production of animal fodder in tropical and sub-tropical countries. Part I. August, 1944	4s. od.
Bulletin 32. Advances in grassland husbandry and fodder production. August, 1944	4s. od.
Bulletin 33. Ley farming in Sweden: a field day at Svalöf. November, 1944	3s. od.
Bulletin 34. The establishment and early management of sown pastures. Late 1944	7s. od.
IMPERIAL FORESTRY BUREAU, OXFORD.	
2. Co-operation in forestry. April, 1944	4s. od.
IMPERIAL BUREAU OF SOIL SCIENCE, HARPENDEN.	
41. The take-all disease of cereals. S. D. Garrett. 1942	2s. 6d.
42. The mineralogy of soil colloids. G. Nagelschmidt. February, 1944	2s. 6d.

All correspondence regarding subscriptions to current and back volumes of abstracting journals and the purchase of Occasional Publications, Technical Communications, Bulletins, Bibliographies, etc., to be sent to: Imperial Agricultural Bureaux, Central Sales Branch, Penglais, ABERYSTWYTH, Great Britain.



IMPERIAL BUREAU OF HORTICULTURE
AND PLANTATION CROPS

HORTICULTURAL ABSTRACTS

Issued quarterly by the Imperial Bureau of Horticulture and Plantation Crops, East Malling, Kent, England. Price 25/- a volume of four numbers, single copies, 7/6. Concession price to subscribers ordering direct in Great Britain and other countries of the British Commonwealth of Nations 20/- a volume. Payments in sterling or at Bank of England rates of exchange.

IMPERIAL AGRICULTURAL BUREAUX

EXECUTIVE COUNCIL,

2 Queen Anne's Gate Buildings, London, S.W.1.

IMPERIAL BUREAU OF SOIL SCIENCE,

Rothamsted Experimental Station, Harpenden, Herts.

IMPERIAL BUREAU OF ANIMAL NUTRITION,

The Reid Library, Rowett Institute, Bucksburn, Aberdeen.

IMPERIAL BUREAU OF ANIMAL HEALTH,

Veterinary Laboratory, New Haw, Weybridge, Surrey.

IMPERIAL BUREAU OF ANIMAL BREEDING AND GENETICS,

King's Buildings, University of Edinburgh, Scotland.

IMPERIAL BUREAU OF PLANT BREEDING AND GENETICS,

School of Agriculture, Cambridge.

IMPERIAL BUREAU OF PASTURES AND FORAGE CROPS,

Agricultural Research Building, Penglais, Aberystwyth.

IMPERIAL BUREAU OF HORTICULTURE AND PLANTATION CROPS,

East Malling Research Station, East Malling, Kent.

IMPERIAL BUREAU OF AGRICULTURAL PARASITOLOGY (HELMINTHOLOGY),

Winches Farm, Hatfield Road, St. Albans, Herts.

IMPERIAL FORESTRY BUREAU,

39 Museum Road, Oxford.

IMPERIAL BUREAU OF DAIRY SCIENCE,

National Institute for Research in Dairying, Shinfield, Reading.

STAFF OF THE IMPERIAL BUREAU OF HORTICULTURE AND PLANTATION CROPS.

Director R. G. HATTON, C.B.E., M.A., D.Sc., F.R.S.

Deputy Director D. AKENHEAD, M.A., B.Sc.

Assistants G. ST. CLAIR FEILDEN, B.A.

V. H. GOLDSCHMIDT, Ph.D.

PUBLICATIONS STILL AVAILABLE, JUNE, 1945

HORTICULTURAL ABSTRACTS

Issued Quarterly since April 1931.

Annual Subscription, 25/-.* Single parts, 7/6. Back numbers available at same prices.

* 5/- less to subscribers in the British Commonwealth (other than trade) who send their subscriptions direct to Imperial Agricultural Bureaux, Central Sales Branch, Agricultural Research Building, Penglais, Aberystwyth, Wales.

SUBJECT AND AUTHOR INDEX TO HORTICULTURAL ABSTRACTS, Volumes I-X, 1931-1940, 1941, 25s.

TECHNICAL COMMUNICATIONS

2. FIELD EXPERIMENTS IN HORTICULTURE. 1931. *T. N. Hoblyn.* 2/-.
4. PROBLEMS OF FRUIT TREE NUTRITION. 1933. *Dr. T. Wallace.* 2/-.
5. THE "DEGENERATION" OF THE STRAWBERRY. 1934. *D. Akenhead, R. V. Harris, G. H. Berkeley, A. M. Massee.* 2/-.
6. THE NUTRITION AND MANURING OF SOFT FRUITS. 1936. *Dr. T. Wallace.* 2/-.
7. VEGETATIVE PROPAGATION OF TROPICAL AND SUB-TROPICAL FRUITS. 1936. *G. St. Clair Feilden and R. J. Garner.* 2/-.
8. HORTICULTURAL ASPECTS OF WOOLLY APHIS CONTROL, TOGETHER WITH A SURVEY OF THE LITERATURE. 1936. *R. M. Greenslade.* 2/6.
9. A REVIEW OF THE LITERATURE ON STOCK-SCION INCOMPATIBILITY IN FRUIT TREES, WITH PARTICULAR REFERENCE TO POME AND STONE FRUITS. 1937. *G. K. Argles.* 5/-.
10. PLANT INJECTION FOR DIAGNOSTIC AND CURATIVE PURPOSES. 1938. *W. A. Roach.* 5/-.
11. FRUIT JUICES AND RELATED PRODUCTS. 1939. *V. L. S. Charley and T. H. J. Harrison.* 5/-.
12. PLANT HORMONES AND THEIR PRACTICAL IMPORTANCE IN HORTICULTURE. 1939. *H. L. Pearse.* 3/6.
13. VEGETATIVE PROPAGATION OF TROPICAL AND SUB-TROPICAL PLANTATION CROPS. 1940. *G. St. Clair Feilden and R. J. Garner.* 3/6.
14. PROPAGATION BY CUTTINGS AND LAYERS. RECENT WORK AND ITS APPLICATION, WITH SPECIAL REFERENCE TO POME AND STONE FRUITS. 1944. *R. J. Garner.* 3/6.

OCCASIONAL PAPERS

1. TECHNIQUE IN POT CULTURE FOR FRUIT PLANTS. 1933. *Dr. T. Wallace.* 6d. (stencil).
2. EXPERIMENTAL DATA ON ORCHARD AND SMALL FRUIT MANURING. 1933. *S. T. Antoshin.* 1/-.
3. ANNOTATED BIBLIOGRAPHY ON BITTER PIT. 1934. 1/6.
6. HARICOT BEANS. 1941. *G. St. C. Feilden.* 1/-.

N.B.—Payment in sterling. If drafts in other currencies are sent, official or Bank of England rates only can be accepted.

IMPERIAL AGRICULTURAL BUREAUX

JOURNALS PUBLISHED BY BUREAUX ON RELATED SUBJECTS

Published by the

PLANT BREEDING ABSTRACTS	..	Imperial Bureau of Plant Breeding and Genetics, Cambridge.
HERBAGE ABSTRACTS	Imperial Bureau of Pastures and Forage Crops, Aberystwyth.
FORESTRY ABSTRACTS	Imperial Forestry Bureau, Oxford.
SOILS AND FERTILIZERS	Imperial Bureau of Soil Science, Harpenden.

Annual subscription for these journals is 25s. (with a special reduction of 20 per cent. for orders received direct from subscribers in Great Britain, the Dominions and Colonies).

RECENT AND FORTHCOMING OCCASIONAL PUBLICATIONS ON AGRICULTURE AND FORESTRY

I.A.B. JOINT PUBLICATIONS

No.		Price.
4.	CO-ORDINATED TRIALS WITH PHENOTHIAZINE AGAINST NEMATODES IN LAMBS. Imperial Bureaux of Animal Health and Agricultural Parasitology. Pages: 56	3s. 6d.
5.	THE PRODUCTION OF SEED OF ROOT CROPS AND VEGETABLES. Imperial Bureaux of Horticulture and Plantation Crops Pastures and Forage Crops, and Plant Breeding and Genetics. July, 1943. Pages: 92	3s. od.
6.	ALTERNATE HUSBANDRY. Imperial Bureaux of Pastures and Forage Crops, Soil Science, Animal Breeding and Genetics and Animal Health. March, 1944	5s. od.
7.	IMPERATA CYLINDRICA: ITS ECONOMIC SIGNIFICANCE AND CONTROL. Imperial Forestry Bureau and the Imperial Bureau of Pastures and Forage Crops. March, 1944	2s. 6d.

TECHNICAL COMMUNICATIONS, ETC.

	Price.
IMPERIAL BUREAU OF PLANT BREEDING AND GENETICS, CAMBRIDGE.	
Sixth List of New and Promising Varieties. October, 1944	1s. od.
Bibliography on Insect Pest Resistance in Agricultural Plants. February, 1944	1s. 6d.
Photoperiodism in the Potato. October, 1943	2s. 6d.
Potato collecting expedition in Mexico and South America. II. Taxonomy and systematic classification of the collections. June, 1944	7s. 6d.
IMPERIAL BUREAU OF PASTURES AND FORAGE CROPS, ABERYSTWYTH.	
Bulletin 31. The production of animal fodder in tropical and sub-tropical countries. Part I. August, 1944	4s. od.
Bulletin 32. Advances in grassland husbandry and fodder production. August, 1944	4s. od.
Bulletin 33. Ley farming in Sweden: a field day at Svalöf. November, 1944	3s. od.
Bulletin 34. The establishment and early management of sown pastures. Late 1944	7s. od.
IMPERIAL FORESTRY BUREAU, OXFORD.	
2. Co-operation in forestry. April, 1944	4s. od.
IMPERIAL BUREAU OF SOIL SCIENCE, HARPENDEN.	
41. The take-all disease of cereals. S. D. Garrett. 1942	2s. 6d.
42. The mineralogy of soil colloids. G. Nagelschmidt. February, 1944	2s. 6d.

All correspondence regarding subscriptions to current and back volumes of abstracting journals and the purchase of Occasional Publications, Technical Communications, Bulletins, Bibliographies, etc., to be sent to: Imperial Agricultural Bureaux, Central Sales Branch, Penglais, ABERYSTWYTH, Great Britain.



IMPERIAL BUREAU OF HORTICULTURE
AND PLANTATION CROPS

HORTICULTURAL ABSTRACTS

Issued quarterly by the Imperial Bureau of Horticulture and Plantation Crops, East Malling, Kent, England. Price 25/- a volume of four numbers, single copies, 7/6. Concession price to subscribers ordering direct in Great Britain and other countries of the British Commonwealth of Nations 20/- a volume. Payments in sterling or at Bank of England rates of exchange.

IMPERIAL AGRICULTURAL BUREAUX

EXECUTIVE COUNCIL,
2 Queen Anne's Gate Buildings, London, S.W.1.

IMPERIAL BUREAU OF SOIL SCIENCE,
Rothamsted Experimental Station, Harpenden, Herts.

IMPERIAL BUREAU OF ANIMAL NUTRITION,
The Reid Library, Rowett Institute, Bucksburn, Aberdeen.

IMPERIAL BUREAU OF ANIMAL HEALTH,
Veterinary Laboratory, New Haw, Weybridge, Surrey.

IMPERIAL BUREAU OF ANIMAL BREEDING AND GENETICS,
King's Buildings, University of Edinburgh, Scotland.

IMPERIAL BUREAU OF PLANT BREEDING AND GENETICS,
School of Agriculture, Cambridge.

IMPERIAL BUREAU OF PASTURES AND FORAGE CROPS,
Agricultural Research Building, Penglais, Aberystwyth.

IMPERIAL BUREAU OF HORTICULTURE AND PLANTATION CROPS,
East Malling Research Station, East Malling, Kent.

IMPERIAL BUREAU OF AGRICULTURAL PARASITOLOGY (HELMINTHOLOGY),
Winches Farm, Hatfield Road, St. Albans, Herts.

IMPERIAL FORESTRY BUREAU,
39 Museum Road, Oxford.

IMPERIAL BUREAU OF DAIRY SCIENCE,
National Institute for Research in Dairying, Shinfield, Reading.

STAFF OF THE IMPERIAL BUREAU OF HORTICULTURE AND PLANTATION CROPS.

<i>Director</i>	R. G. HATTON, C.B.E., M.A., D.Sc., F.R.S.
<i>Deputy Director</i> ..	D. AKENHEAD, M.A., B.Sc.
<i>Assistants</i>	G. ST. CLAIR FEILDEN, B.A.
	V. H. GOLDSCHMIDT, Ph.D.

PUBLICATIONS

TECHNICAL PUBLICATIONS PUBLISHED IN 1945

15. SPRING FROST DAMAGE IN ORCHARDS AND ITS POSSIBLE PREVENTION. 1s. 6d.
16. FURTHER WORK ON PLANT INJECTION FOR DIAGNOSTIC AND CURATIVE PURPOSES.
W. A. Roach and W. O. Roberts. 1s. 6d.

TECHNICAL PUBLICATIONS TO APPEAR SHORTLY

- DIAGNOSIS OF MINERAL DEFICIENCIES BY ANALYTICAL METHODS.
PREMATURE FRUIT FALL AND ITS PREVENTION BY GROWTH SUBSTANCES.

OTHER TECHNICAL PUBLICATIONS AVAILABLE

2. FIELD EXPERIMENTS IN HORTICULTURE. 1931. *T. N. Hoblyn.* 2/-.
4. PROBLEMS OF FRUIT TREE NUTRITION. 1933. *T. Wallace.* 2/-.
5. THE "DEGENERATION" OF THE STRAWBERRY. 1934. *D. Akenhead, R. V. Harris, G. H. Berkeley, A. M. Massee.* 2/-.
6. THE NUTRITION AND MANURING OF SOFT FRUITS. 1936. *T. Wallace.* 2/-.
7. VEGETATIVE PROPAGATION OF TROPICAL AND SUB-TROPICAL FRUITS. 1936. *G. St. Clair Feilden and R. J. Garner.* 2/-.
8. HORTICULTURAL ASPECTS OF WOOLLY APHIS CONTROL, TOGETHER WITH A SURVEY OF THE LITERATURE. *R. M. Greenslade.* 2/6.
9. A REVIEW OF THE LITERATURE ON STOCK-SCION INCOMPATIBILITY IN FRUIT TREES, WITH PARTICULAR REFERENCE TO POME AND STONE FRUITS. 1937. *G. K. Argles.* 5/-.
10. PLANT INJECTION FOR DIAGNOSTIC AND CURATIVE PURPOSES. 1938. *W. A. Roach.* 5/-.
11. FRUIT JUICES AND RELATED PRODUCTS. 1939. *V. L. S. Charley and T. H. J. Harrison.* 5/-.
12. PLANT HORMONES AND THEIR PRACTICAL IMPORTANCE IN HORTICULTURE. 1939. *H. L. Pearse.* 3/6.
13. VEGETATIVE PROPAGATION OF TROPICAL AND SUB-TROPICAL PLANTATION CROPS. 1940. *G. St. Clair Feilden and R. J. Garner.* 3/6.
14. PROPAGATION BY CUTTINGS AND LAYERS. RECENT WORK AND ITS APPLICATION, WITH SPECIAL REFERENCE TO POME AND STONE FRUITS. 1944. *R. J. Garner.* 3/6.

OCCASIONAL PAPERS AVAILABLE

1. TECHNIQUE IN POT CULTURE FOR FRUIT PLANTS. 1933. *T. Wallace.* 6d. (stencil).
2. EXPERIMENTAL DATA ON ORCHARD AND SMALL FRUIT MANURING. 1933. *S. T. Antoshin.* 1/-.
6. HARICOT BEANS. 1941. *G. St. Clair Feilden.* 1/-.

HORTICULTURAL ABSTRACTS

Issued Quarterly since April 1931. For subscription rates see Title Page.

SUBJECT AND AUTHOR INDEX TO HORTICULTURAL ABSTRACTS, Volumes I-X, 1931-1940, 25s.

IMPERIAL AGRICULTURAL BUREAUX

JOURNALS PUBLISHED BY BUREAUX ON RELATED SUBJECTS

Published by the

PLANT BREEDING ABSTRACTS	..	Imperial Bureau of Plant Breeding and Genetics, Cambridge.
HERBAGE ABSTRACTS	Imperial Bureau of Pastures and Forage Crops, Aberystwyth.
FORESTRY ABSTRACTS	Imperial Forestry Bureau, Oxford.
SOILS AND FERTILIZERS	Imperial Bureau of Soil Science, Harpenden.

Annual subscription for these journals is 25s. (with a special reduction of 20 per cent. for orders received direct from subscribers in Great Britain, the Dominions and Colonies).

RECENT AND FORTHCOMING OCCASIONAL PUBLICATIONS ON AGRICULTURE AND FORESTRY

I.A.B. JOINT PUBLICATIONS

No.		Price.
4.	CO-ORDINATED TRIALS WITH PHENTHIAZINE AGAINST NEMATODES IN LAMBS. Imperial Bureaux of Animal Health and Agricultural Parasitology. Pages: 56	3s. 6d.
5.	THE PRODUCTION OF SEED OF ROOT CROPS AND VEGETABLES. Imperial Bureaux of Horticulture and Plantation Crops Pastures and Forage Crops, and Plant Breeding and Genetics. July, 1943. Pages: 92	3s. od.
6.	ALTERNATE HUSBANDRY. Imperial Bureaux of Pastures and Forage Crops, Soil Science, Animal Breeding and Genetics and Animal Health. March, 1944	5s. od.
7.	IMPERATA CYLINDRICA: ITS ECONOMIC SIGNIFICANCE AND CONTROL. Imperial Forestry Bureau and the Imperial Bureau of Pastures and Forage Crops. March, 1944	2s. 6d.

TECHNICAL COMMUNICATIONS, ETC.

	Price.
IMPERIAL BUREAU OF PLANT BREEDING AND GENETICS, CAMBRIDGE.	
Sixth List of New and Promising Varieties. October, 1944	1s. od.
Bibliography on Insect Pest Resistance in Agricultural Plants. February, 1944	1s. 6d.
Photoperiodism in the Potato. October, 1943	2s. 6d.
Potato collecting expedition in Mexico and South America. II. Taxonomy and systematic classification of the collections. June, 1944	7s. 6d.
IMPERIAL BUREAU OF PASTURES AND FORAGE CROPS, ABERYSTWYTH.	
Bulletin 31. The production of animal fodder in tropical and sub-tropical countries. Part I. August, 1944	4s. od.
Bulletin 32. Advances in grassland husbandry and fodder production. August, 1944	4s. od.
Bulletin 33. Ley farming in Sweden: a field day at Svalöf. November, 1944	3s. od.
Bulletin 34. The establishment and early management of grass-legume mixtures. August, 1945.	7s. od.
IMPERIAL FORESTRY BUREAU, OXFORD.	
2. Co-operation in forestry. April, 1944	4s. od.
IMPERIAL BUREAU OF SOIL SCIENCE, HARPENDEN.	
41. The take-all disease of cereals. S. D. Garrett. 1942	2s. 6d.
42. The mineralogy of soil colloids. G. Nagelschmidt. February, 1944	2s. 6d.

All correspondence regarding subscriptions to current and back volumes of abstracting journals and the purchase of Occasional Publications, Technical Communications, Bulletins, Bibliographies, etc., to be sent to: Imperial Agricultural Bureaux, Central Sales Branch, Penglais, ABERYSTWYTH, Great Britain.

VOL. XV. No. 4, Abs. 1367-2082f

DECEMBER 1945



IMPERIAL BUREAU OF HORTICULTURE
AND PLANTATION CROPS

HORTICULTURAL ABSTRACTS

Issued quarterly by the Imperial Bureau of Horticulture and Plantation Crops, East Malling, Kent, England. Price 25/- a volume of four numbers, single copies, 7/6. Concession price to subscribers ordering direct in Great Britain and other countries of the British Commonwealth of Nations 20/- a volume. Payments in sterling or at Bank of England rates of exchange.

PUBLICATIONS

TECHNICAL COMMUNICATIONS PUBLISHED IN 1945

15. SPRING FROST DAMAGE IN ORCHARDS AND ITS POSSIBLE PREVENTION. 1s. 6d.
16. FURTHER WORK ON PLANT INJECTION FOR DIAGNOSTIC AND CURATIVE PURPOSES.
W. A. Roach and W. O. Roberts. 1s. 6d.

TECHNICAL COMMUNICATIONS TO APPEAR SHORTLY

DIAGNOSIS OF MINERAL DEFICIENCIES BY ANALYTICAL METHODS.

PREMATURE FRUIT FALL AND ITS PREVENTION BY GROWTH SUBSTANCES.

OTHER TECHNICAL COMMUNICATIONS AVAILABLE

2. FIELD EXPERIMENTS IN HORTICULTURE. 1931. *T. N. Hoblyn.* 2/-.
4. PROBLEMS OF FRUIT TREE NUTRITION. 1933. *T. Wallace.* 2/-.
5. THE "DEGENERATION" OF THE STRAWBERRY. 1934. *D. Akenhead, R. V. Harris, G. H. Berkeley, A. M. Massee.* 2/-.
6. THE NUTRITION AND MANURING OF SOFT FRUITS. 1936. *T. Wallace.* 2/-.
7. VEGETATIVE PROPAGATION OF TROPICAL AND SUB-TROPICAL FRUITS. 1936. *G. St. Clair Feilden and R. J. Garner.* 2/-.
9. A REVIEW OF THE LITERATURE ON STOCK-SCION INCOMPATIBILITY IN FRUIT TREES, WITH PARTICULAR REFERENCE TO POME AND STONE FRUITS. 1937. *G. K. Argles.* 5/-.
10. PLANT INJECTION FOR DIAGNOSTIC AND CURATIVE PURPOSES. 1938. *W. A. Roach.* 5/-.
12. PLANT HORMONES AND THEIR PRACTICAL IMPORTANCE IN HORTICULTURE. 1939. *H. L. Pearse.* 3/6.
13. VEGETATIVE PROPAGATION OF TROPICAL AND SUB-TROPICAL PLANTATION CROPS. 1940. *G. St. Clair Feilden and R. J. Garner.* 3/6.
14. PROPAGATION BY CUTTINGS AND LAYERS. RECENT WORK AND ITS APPLICATION, WITH SPECIAL REFERENCE TO POME AND STONE FRUITS. 1944. *R. J. Garner.* 3/6.

OCCASIONAL PAPERS AVAILABLE

1. TECHNIQUE IN POT CULTURE FOR FRUIT PLANTS. 1933. *T. Wallace.* 6d. (stencil).
2. EXPERIMENTAL DATA ON ORCHARD AND SMALL FRUIT MANURING. 1933. *S. T. Antoshin.* 1/-.
6. HARICOT BEANS. 1941. *G. St. Clair Feilden.* 1/-.

HORTICULTURAL ABSTRACTS

Issued Quarterly since April 1931. For subscription rates see Title Page.

SUBJECT AND AUTHOR INDEX TO HORTICULTURAL ABSTRACTS, Volumes I-X, 1931-1940, 25s.

IMPERIAL AGRICULTURAL BUREAUX

JOURNALS PUBLISHED BY BUREAUX ON RELATED SUBJECTS

Published by the

PLANT BREEDING ABSTRACTS	Imperial Bureau of Plant Breeding and Genetics, Cambridge.
HERBAGE ABSTRACTS	Imperial Bureau of Pastures and Forage Crops, Aberystwyth.
FORESTRY ABSTRACTS	Imperial Forestry Bureau, Oxford.
SOILS AND FERTILIZERS	Imperial Bureau of Soil Science, Harpenden.

Annual subscription for these journals is 25s. (with a special reduction of 20 per cent. for orders received direct from subscribers in Great Britain, the Dominions and Colonies).

RECENT AND FORTHCOMING OCCASIONAL PUBLICATIONS ON AGRICULTURE AND FORESTRY

I.A.B. JOINT PUBLICATIONS

No.		Price.
6.	ALTERNATE HUSBANDRY. Imperial Bureaux of Pastures and Forage Crops, Soil Science, Animal Breeding and Genetics and Animal Health. March, 1944	5s. od.
7.	IMPERATA CYLINDRICA: ITS ECONOMIC SIGNIFICANCE AND CONTROL. Imperial Forestry Bureau and the Imperial Bureau of Pastures and Forage Crops. March, 1944	2s. 6d.
8.	FOREST TREE BREEDING AND GENETICS. Imperial Bureaux of Plant Breeding and Genetics, and Forestry. August, 1945	5s. od.
9.	THE USE OF AERIAL SURVEY IN FORESTRY AND AGRICULTURE. Imperial Bureaux of Forestry, and Pastures and Forage Crops. 1946	4s. od.
10.	THE USE AND MISUSE OF SHRUBS AND TREES AS FODDER. Bureaux of Pastures and Forage Crops, Forestry and Animal Nutrition. 1946	6s. od.

TECHNICAL COMMUNICATIONS, ETC.

	Price.
IMPERIAL BUREAU OF PLANT BREEDING AND GENETICS, CAMBRIDGE. Sixth List of New and Promising Varieties. October, 1944	1s. od.
Potato collecting expedition in Mexico and South America. II. Taxonomy and systematic classification of the collections. June, 1944	7s. 6d.
IMPERIAL INSTITUTE OF ENTOMOLOGY. A review of the Literature on Soil Insecticides. 1945	10s. od.
IMPERIAL MYCOLOGICAL INSTITUTE, KEW. Mycol. Paper No. 11. A contribution to the knowledge of the Ustilaginales in China. 1945	2s. 3d.
Mycol. Paper No. 12. Notes on Indian Fungi. III. 1945	3s. od.
IMPERIAL BUREAU OF PASTURES AND FORAGE CROPS, ABERYSTWYTH. Bulletin 34. The establishment and early management of grass-legume mixtures. August, 1945.	7s. od.
Bulletin 35. The forage resources of Latin America—El Salvador. September, 1945	2s. 6d.
IMPERIAL FORESTRY BUREAU, OXFORD. 2. Co-operation in forestry. April, 1944	4s. od.
3. Forestry credit. February, 1945	2s. 6d.
4. The application of meteorology to forest fire protection. August, 1945	2s. 6d.
IMPERIAL BUREAU OF SOIL SCIENCE, HARPENDEN. 42. The mineralogy of soil colloids. G. Nagelschmidt. February, 1944	2s. 6d.

All correspondence regarding subscriptions to current and back volumes of abstracting journals and the purchase of Occasional Publications, Technical Communications, Bulletins, Bibliographies, etc., to be sent to: Imperial Agricultural Bureaux, Central Sales Branch, Penglais, ABERYSTWYTH, Great Britain.

LISTS OF PUBLICATIONS OF ALL THE
COMMONWEALTH AGRICULTURAL BUREAUX
ARE OBTAINABLE FROM C.A.B., CENTRAL
SALES BRANCH, PENGLAIS, ABERYSTWYTH,
WALES

